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ABSTRACT

The third biennial outcome evaluation of the state of Washington's workforce development system analyzed the results of nine of the state's largest workforce development programs plus employer-provided training for participants who left programs from July 1, 1997 to June 30, 1998. For reporting results, the nine programs were grouped into three training program clusters based on participant characteristics (programs serving adults, programs serving adults with barriers to employment, and programs serving youth). Programs were evaluated in terms of seven desired outcomes (competencies, employment, earnings, productivity, reduced poverty, customer satisfaction, and return on investment), using data from program records of 65,000 persons who left one of the programs during the year studied, mailed survey responses from 4,000 employers, telephone survey responses from 6,791 former participants, and computer matches with employment records and postsecondary education enrollment data. Results were reported in terms of each of the outcomes for each of the program clusters. In general, the following areas of strength were found: participant satisfaction was high; the majority of participants receiving skills training reported improvement; support services met the needs of those receiving them; and employment rates, wages, and earnings were higher than those found in the last evaluation. Areas of weakness identified and targeted for improvement included the following: employer satisfaction, information about job openings and career counseling, child care services provision, gender differences in wages, and training provided by employers. (The surveys used to capture the study data and a detailed analysis are included in the report.) (KC)

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Workforce Training Results

An Evaluation of Washington State's Workforce Development System

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WORKFORCE TRAINING AND EDUCATION COORDINATING BOARD

The Vision

The Workforce Training and Education Coordinating Board is Washington State's valued and trusted source of leadership for the workforce development system.

Mission Statement

The Workforce Training and Education Coordinating Board's mission is to bring business, labor, and the public sector together to shape strategies to best meet the state and local workforce and employer needs of Washington in order to create and sustain a high skill, high wage economy.

To fulfill this Mission, Board members, with the support of staff, work together to:

- Advise the Governor and Legislature on workforce development policy.
- Promote a system of workforce development that responds to the lifelong learning needs of the current and future workforce.
- Advocate for the non-baccalaureate training and education needs of workers and employers.
- Facilitate innovations in workforce development policy and practices.
- Ensure system quality and accountability by evaluating results and supporting high standards and continuous improvement.

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Workforce Training Results Customer Satisfaction Survey

The Workforce Training and Education Coordinating Board is committed to high-quality customer satisfaction and continuous improvement. You can help us meet our commitment by completing this form, detaching it, and mailing it in. Please circle the words that best answer the following questions. In the space provided please elaborate on your response, if appropriate.

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Workforce Training Results—2000

Executive Summary

Introduction

This is the third biennial outcome evaluation of Washington's workforce development system. It analyzes the results of nine of the state's largest workforce development programs plus employer-provided training. These programs account for 90 percent of public expenditures in the state workforce development system. The report examines outcomes for participants who left programs during the period from July 1, 1997, to June 30, 1998.

The purpose of the evaluation is to report the results of workforce training and to recommend areas for improvement. The report discusses the results of the programs in terms of the seven desired outcomes for the state training system established by the Workforce Training and Education Coordinating Board (Workforce Board). These desired outcomes are not static targets but are conditions that should be increasingly true for all people.

Findings are based on the following sources of data:

- Program records on almost 65,000 individuals who left one of these programs during the 1997-98 school year.[1]
- Mail survey responses from approximately 4,000 employers during the fall of 1999.
- Telephone survey responses from 6,791 former 1997-98 participants during the fall of 1999.

[1] These records include information on all the participants leaving these programs with two exceptions—the private career schools and secondary vocational-technical education programs. Data for the private career schools are based on a voluntary sample of 19 schools. This sample includes some of the largest private career schools, and it includes roughly 26 percent of the students leaving programs during the 1997-98 school year. Information on secondary vocational-technical education is based on a voluntary sample of 109 school districts (47 percent of all districts) and 3 skills centers.

Seven Desired Outcomes for the State Workforce Development System

- ***Competencies***: Washington's workforce possesses the skills and abilities required in the workplace.
- ***Employment***: Washington's workforce finds employment opportunities.
- ***Earnings***: Washington's workforce achieves a family-wage standard of living from earned income.
- ***Productivity***: Washington's workforce is productive.
- ***Reduced Poverty***: Washington's workforce lives above poverty.
- ***Customer Satisfaction***: Workforce development participants and their employers are satisfied with workforce development services and results.
- ***Return on Investment***: Workforce development programs provide returns that exceed program costs.*

* This last outcome is the subject of a net-impact and cost-benefit evaluation conducted by the Workforce Board every four years.

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- Computer matches with the Washington State Employment Security Department employment records from five states (Washington, Idaho, Montana, Alaska, and Oregon) and military personnel records.

- Computer matches with enrollment data from community and technical colleges, public four-year institutions, and several private colleges.

It is important to note that, except for secondary vocational education, ***the participant results presented in this report are for all participants, not just those who completed their program***. Participants are defined as individuals who entered a program and demonstrated the intent to complete a sequence of program activities. The number of participants who leave their program before completion affects program results.

The Three Training Program Clusters
based on participant characteristics

1. Programs Serving Adults
2. Programs Serving Adults With Barriers to Employment
3. Programs Serving Youth

Throughout this report, results are grouped by these three clusters.

Readers are also cautioned to not make improper comparisons among programs or between the previous and current evaluation results. Some evaluation methodologies were improved and different programs serve different populations for different purposes.

Summary of Findings

Program and Participant Characteristics

Figure 1 briefly describes the nine programs included in this report.

The training programs are grouped into three clusters based on participant characteristics: (1) Programs Serving Adults; (2) Programs Serving Adults With Barriers to Employment; and (3) Programs Serving Youth.

Throughout this report, results are grouped by these three clusters.

It is very important to consider the demographic characteristics of program participants. The single most important factor in determining program results is the characteristics of the individuals who entered the program. Programs serving participants who have significant work experience and basic skills can be expected to have higher labor market outcomes than those serving participants with little work experience and low levels of literacy.

FIGURE 1

Programs Included in *Workforce Training Results—2000*

Programs for Adults

Community and Technical College Job Training: Training and education for a Vocational Associate of Arts Degree or a Vocational Certificate and also dislocated worker retraining. This training does not include classes taken by current workers to upgrade skills for their current job, nor does it include the other two mission areas of the colleges—academic transfer education and basic skills instruction.

Private Career Schools: Training provided by private businesses for students intending to complete vocational certificates or degrees. The schools are licensed by the Workforce Board or, if they grant a degree, by the Higher Education Coordinating Board.

Apprenticeship: Training that combines classroom instruction with paid, on-the-job training under the supervision of a journey-level craftsperson or trade professional. Apprenticeships are governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries.

Job Training Partnership Act Title III: Federal employment training program for dislocated workers. The program was administered by the Washington State Employment Security Department at the state level and 12 service delivery areas at the local level, each headed by a private industry council.*

Program Serving Adults With Barriers

Adult Basic Skills Education: Literacy and math instruction for adults who are at a high school level or below. Includes courses in four categories: Adult Basic Education for adults whose skills are at or below the eighth-grade level; English-as-a-Second Language; GED Test Preparation; and High School Completion for adults who want to earn an adult high school diploma. Instruction is provided by community and technical colleges and other organizations such as libraries and community-based organizations, although this evaluation is limited to colleges.

Job Training Partnership Act Title II-A: Federal employment and training program for low-income adults aged 22 and older who experience significant barriers to school or employment. The program was administered by the Washington State Employment Security Department at the state level and by 12 service delivery areas at the local level, each headed by a private industry council.*

Programs Serving Youth

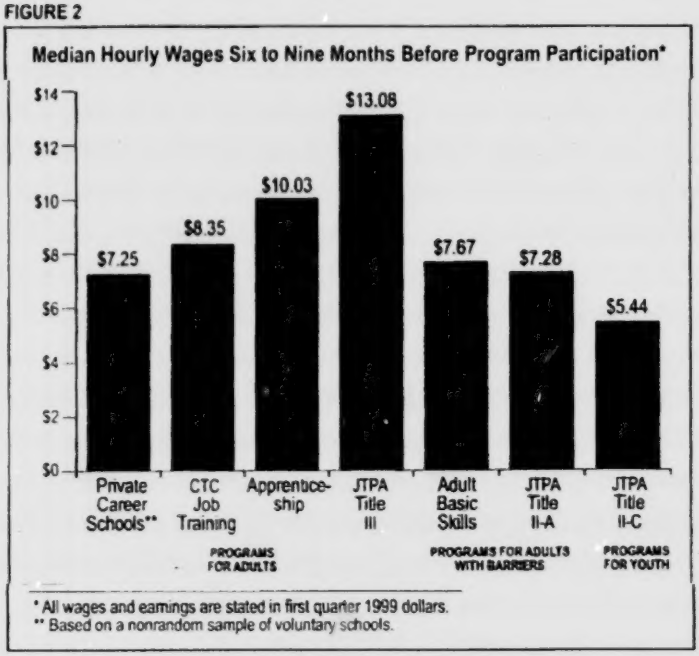
Secondary Vocational Education: Training and vocational education in high schools and vocational skills centers in agriculture, business, marketing, family and consumer sciences, technology, trade and industry, and health occupations.

Job Training Partnership Act Title II-C: Federal employment and training program for low-income youth 16 to 21 years old who experience significant barriers to school or employment. The program was administered by the Washington State Employment Security Department at the state level and by 12 service delivery areas at the local level, each headed by and private industry council.*

Job Training Partnership Act Title II-B: Federal employment and training program for low-income youth 14 to 21 years old who experience significant barriers to school or employment. The program provided employment for approximately eight weeks in the summer and remedial education. The program was administered by the Washington State Employment Security Department at the state level and by 12 service delivery areas at the local level, each headed by a private industry council.*

* This report is based on Job Training Partnership Act programs in place during the period from July 1, 1997, to June 30, 1998. On July 1, 2000, the Workforce Investment Act replaced the Job Training Partnership Act.

FIGURE 2



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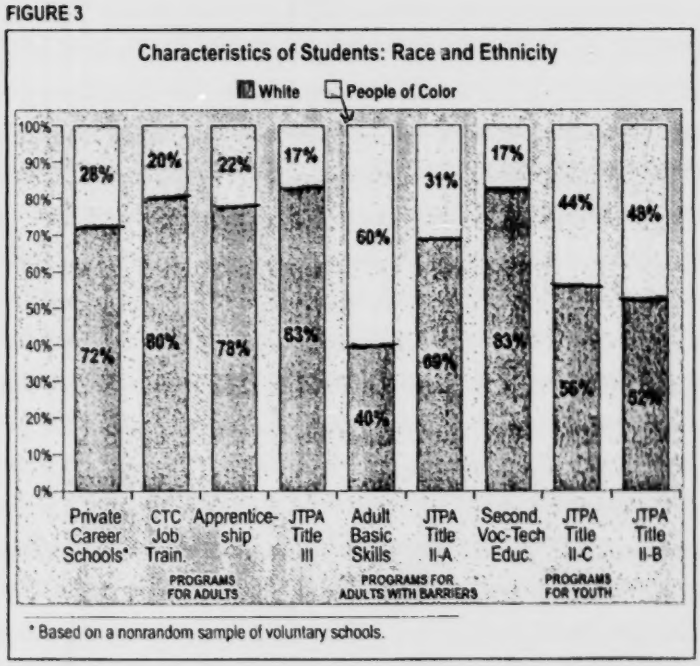

The preprogram wages of the participants reflect the different characteristics of the three clusters of program participants. Most secondary vocational education students and Job Training Partnership Act (JTPA) II-B participants did not have reported employment prior to entering their program. Among those who were employed three quarters prior to entering a program, the median wage was lowest for JTPA Title II-C (youth) participants and highest for Title III (dislocated worker) participants. (See Figure 2.)

The racial and ethnic composition of participants in every program was more diverse than the state's general population. Diversity was greatest in the cluster of programs serving adults with barriers to employment and in the JTPA Title II-B and II-C programs that target youth with barriers to employment. (See Figure 3.) Eighty-three percent of the state's population is white (non-Hispanic). Among JTPA Title II-A participants, for example, only 69 percent were white.

There were some changes from the composition of 1995-96 participants studied by our previous evaluation. The proportion of JTPA Title II-A participants who were people of color declined substantially, falling from 38 to 31 percent. The proportion of secondary vocational-technical education and Title II-C participants who were people of color increased because of substantial increases in the numbers of Hispanic youth served. The proportion of JTPA Title II-C participants who were nonwhite increased from 35 to 44 percent.

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Program Results

Competency Gains

Desired Outcome

Washington's workforce possesses the skills and abilities required in the workplace.

Based on survey results, most participants received job-specific skills training as part of their program. (See Figure 4.) However, not all program participants received it. Adult Basic Skills Education, by the definition used in the study, does not include vocational training and, therefore, is not included in Figure 4. JTPA programs offer a variety of job search assistance and basic skills instruction in addition to job-specific skills training. Between 24 and 32 percent of JTPA participants said they did not receive job-specific skills training before leaving the program.

The most substantial change between the 1995-96 and 1997-98 training cohorts was an apparent decline in the percentage of youth receiving this training. Among secondary vocational-technical education students, the proportion reporting training in job-specific skills declined from 83 to 71 percent. Among JTPA Title II-C participants, the proportion declined from 81 to 68 percent.

Among program participants who received job-specific skills training, almost all said their job-specific skills improved, and in most cases, the participants said their skills improved a lot. (See Figure 5.) Adults are more likely than youth to report substantial improvements in skills. Among adults, the relatively low percentage of apprentices

FIGURE 4

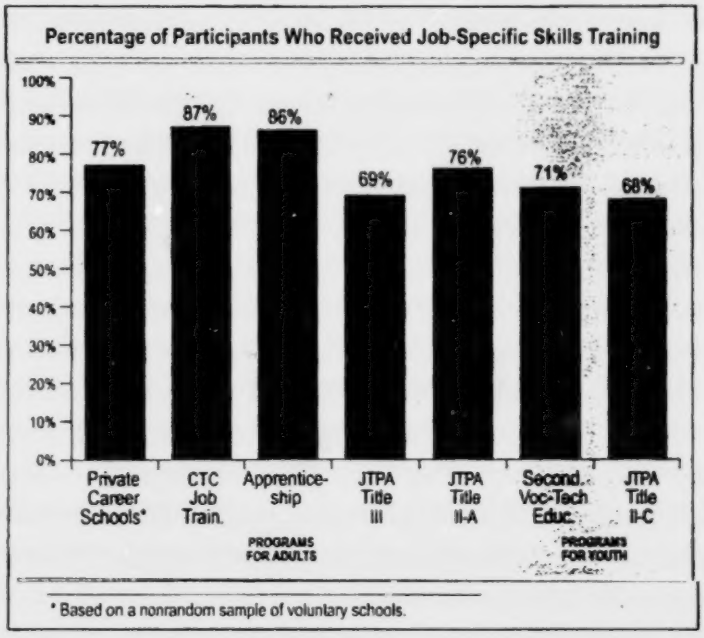
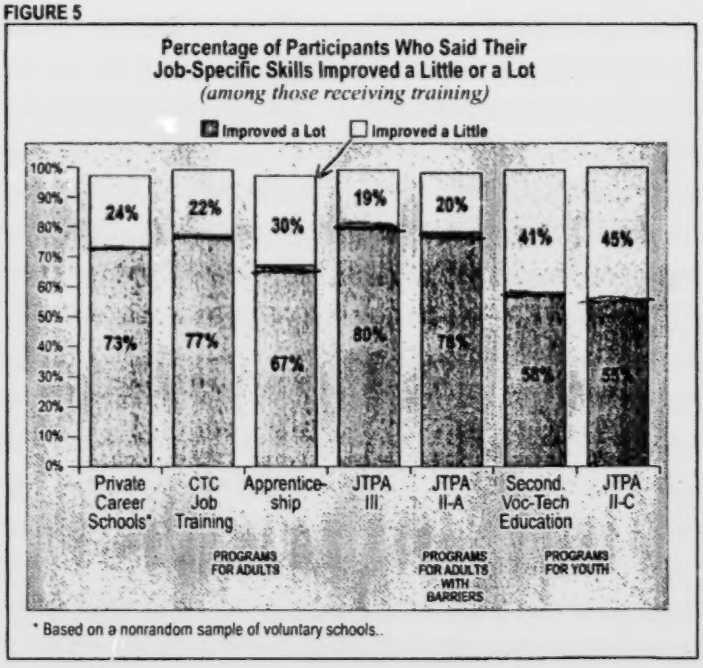


FIGURE 5



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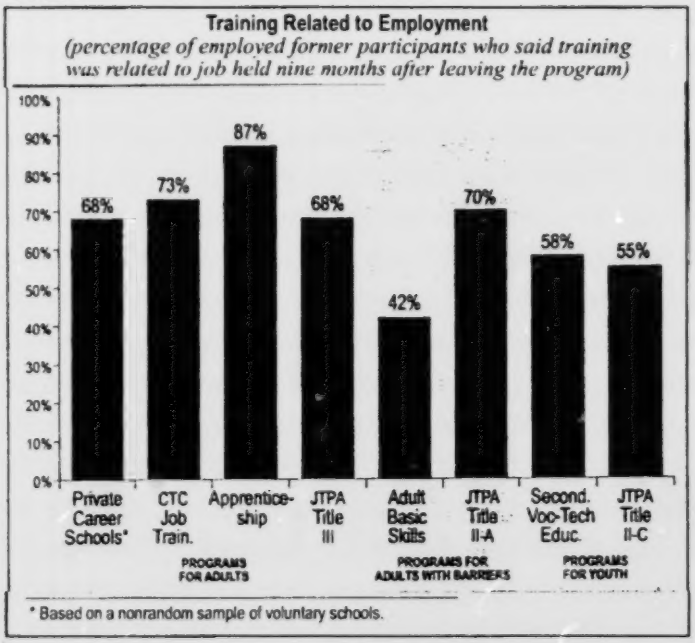
who said their job-specific skills improved a lot might reflect the extensive skills already held by many before entering the program. The proportion reporting their skills improved a lot increased between 1995-96 and 1997-98 for community and technical college job training students (increasing from 70 to 77 percent), JTPA Title III participants (74 to 80 percent), and Title II-A participants (65 to 78 percent).

There were gender differences in the types of training received by participants. For example, men were more likely to report training in the use of machinery. Women were more likely to report training in the use of computers.

FIGURE 6



Another measure of whether training provided participants with the right kinds of skills is whether the former participants believed their training was related to their postprogram employment. In most cases, a large majority of program participants indicated their training was related to the job that they held nine months after leaving the program. (See Figure 6.)

The program with relatively lower results for job-relatedness of training were Adult Basic Skills Education and the programs for youth. In the case of Adult Basic Skills Education, it may be more difficult for survey respondents to understand the relationship of basic skills instruction, as opposed to job-specific skills training, to their jobs. It also may be evidence of the need to more frequently provide adult basic skills instruction in a work context. The results for youth are lower than reported two years ago. The proportion of secondary vocational-technical students reporting job-relatedness of training declined from 70 percent among the 1995-96 cohort to 58 percent among the 1997-98 participants. The proportion declined from 71 to 55 percent among JTPA Title II-C participants.

Participant Satisfaction

Desired Outcome

Workforce development participants and their employers are satisfied with workforce development services and results.

The majority of participants were satisfied with their programs. Satisfaction levels—measured by averaging the percentage reporting they met their educational

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objectives and the percentage satisfied with the overall quality of their programs—are high for all programs. (See Figure 7.) Satisfaction levels are similar to those reported by the 1995-96 program participants.

Although results vary by program, aspects of programs that tended to have the lowest participant satisfaction were support services. Most participants reported receiving the services they required. However, many participants in several programs reported an unmet need for job opening information and career or job counseling. Relatively few participants needed child care assistance. Among those that did, however, high proportions reported their needs were not met.

Employer Satisfaction

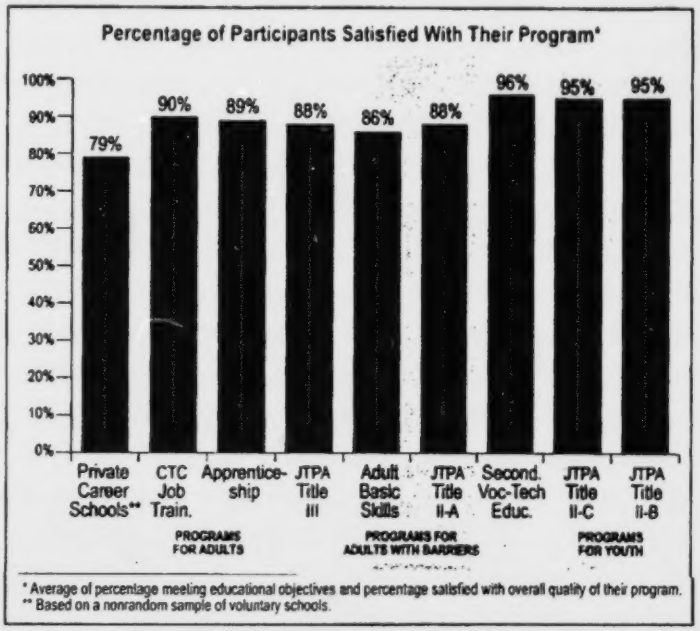
Desire Outcome

Workforce development participants and their employers are satisfied with workforce development services and results.

A majority of employers reported they were satisfied with the skills of new employees who had recently completed one of these programs. However, satisfaction levels were not as high as one would like. Employer satisfaction—measured by averaging the percentages satisfied with various basic, job-specific, and general workplace skills—does vary by program.[2] (See Figure 8.) Between 62 and 74 percent of employers, depending on the program, reported satisfaction.

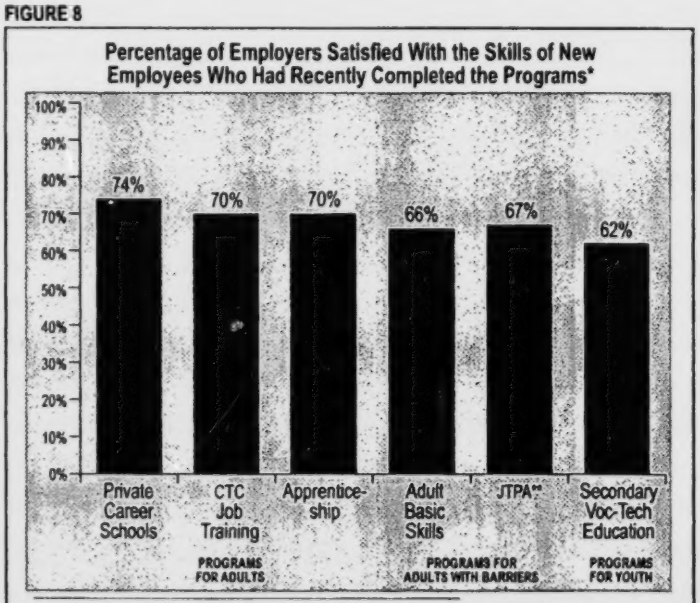
[2] General workplace skills include teamwork, problem solving, communication, work habits, ability to accept supervision, and adaptability to change.

FIGURE 7



* Average of percentage meeting educational objectives and percentage satisfied with overall quality of their program.
** Based on a nonrandom sample of voluntary schools.

FIGURE 8



* Average of percentage satisfied with various basic, job-specific, and general workplace skills
** Refers to all JTPA programs (Titles II-A, II-B, and II-C).

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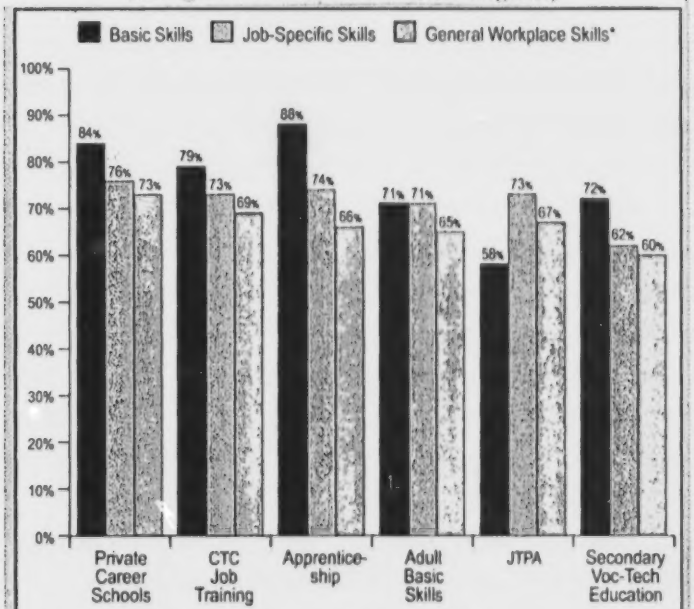
There were some changes between the results for the 1995-96 and 1997-98 participants. Employer satisfaction increased for adult basic skills participants (rising from 55 to 66 percent) and JTPA participants (59 to 67 percent).[3] Employer satisfaction with the skills of secondary vocational-technical education students declined (from 70 to 62 percent).

[3] It was not possible to measure employer satisfaction for each JTPA program separately. These results refer to all JTPA participants (Titles II-A, II-B, II-C, and III) as a whole.

FIGURE 9

Percentage of Employers Satisfied With the Skills of New Employees Who Had Recently Completed the Program
(average across skills in the selected categories)



* General workplace skills include teamwork, problem solving, communication, work habits, accepting supervision, and adaptability to change.

Employers tended to be most satisfied with the basic skills of new employees. (See Figure 9.) Among the basic skills, satisfaction was typically higher for reading skills and lower for math and writing. Employers were least satisfied with general workplace skills—teamwork, problem-solving skills, communication, work habits, acceptance of supervision, and adaptability to change.

Satisfaction levels for job-specific skills tended to fall between those for basic skills and general workplace skills. Roughly three quarters of employers were satisfied with the job-specific skills of new employees who recently completed a training program for adults. In other words, employers were not satisfied with the occupational skills of one in every four workers.

Employment

Desired Outcome

Washington's workforce finds employment opportunities.

According to survey results, most former program participants reported having a job during the third quarter (six to nine months) after they left their programs. (See Figure 10.) Employment rates vary across programs. They are highest for programs serving adults and, as expected, are lower for programs serving youth. When examining these results, one should be aware that many former participants in some programs continued their education during the year following their training. Based on computer

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matches, 8 percent of JTPA Title II-A participants were enrolled in community and technical college programs during the third quarter after leaving JTPA training. During the third postprogram quarter, 26 percent of the former secondary vocational-technical education students were enrolled at a community and technical college, and 10 percent were enrolled in a 4-year institution. (Over two-thirds of those enrolled in community colleges were also working.)

We used Employment Security Department records to examine changes in employment rates between participants who left programs during 1995-96 and 1997-98.[4] Employment rates increased substantially among participants in five programs—private career schools, community and technical college job training, adult basic skills education, and JTPA Titles II-A and II-C. (See Figure 11.) These increases reflect, at least in part, the tightening of the labor market. Employment rates for apprenticeship declined slightly, in part for reasons discussed in the next section. The employment rate also declined for secondary vocational-technical education.

FIGURE 10

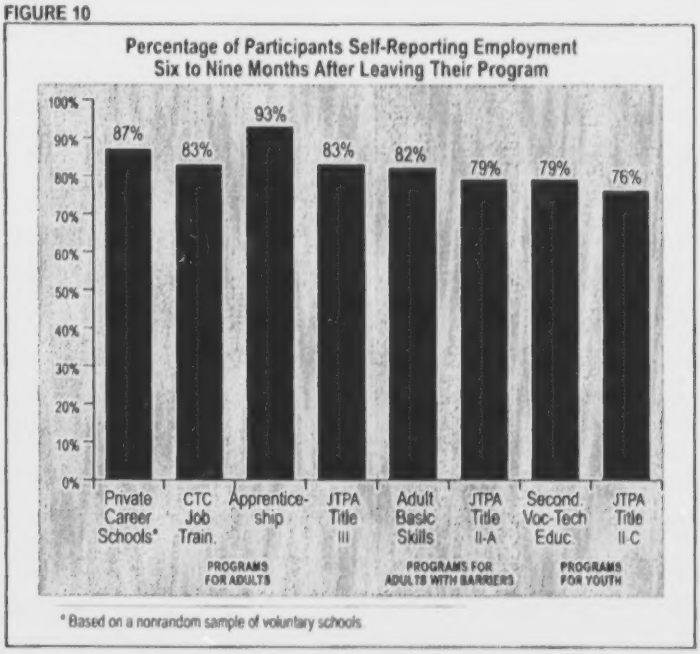
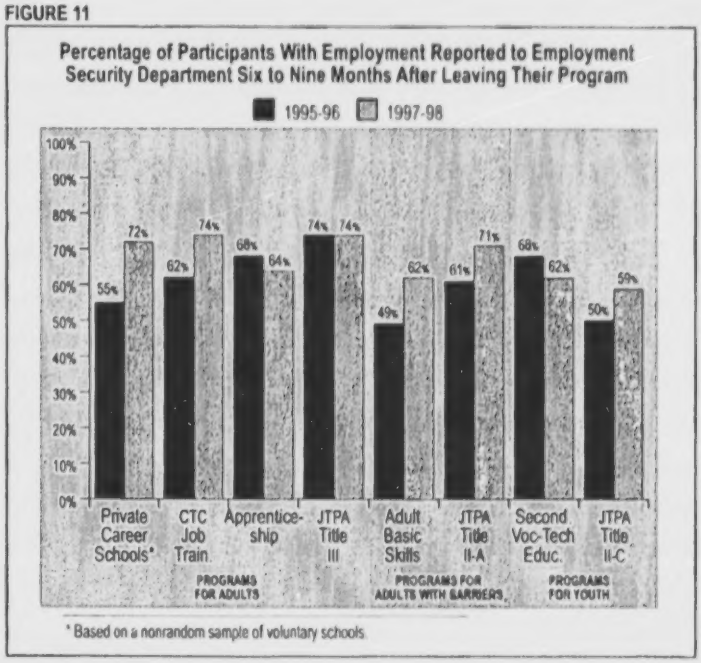


FIGURE 11



[4] Employment rates based on matches with Employment Security data are lower than those based on survey results. Employment Security records do not contain information on self-employment. Estimates also exclude employment in states that are not included in our matching process.

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However, it is difficult to make comparisons over time for this program. Data for secondary vocational education are based on voluntary samples of school districts, and participating districts change over time. Also note that the total placement rate, which takes into account both employment and enrollment in further education, did not fall by as much as did employment alone.[5]

FIGURE 12

Median Hourly Wages and Annualized Earnings Six to Nine Months After Leaving the Program

Programs	Hourly Wages of 1997-98 Participants	Annualized Earnings of 1997-98 Participants	Percentage Change From 1995-96* WAGES	EARNINGS
Adults				
Private Career Schools**	$8.92	$15,612	3%	4%
Community and Technical College Job Training	$10.83	$19,600	8%	14%
Apprenticeship	$16.59	$26,792	-8%	-5%
JTPA Title III	$12.07	$22,580	-12%	-12%
Adults With Barriers to Employment				
Adult Basic Skills	$8.47	$15,056	10%	22%
JTPA Title II-A	$8.78	$14,568	12%	22%
Youth				
Secondary Voc-Tech Education	$7.41	$9,468	9%	7%
JTPA Title II-C	$6.48	$6,388	5%	6%

*These are changes in real earnings, i.e., after controlling for inflation.
** Based on a nonrandom sample of voluntary schools.

Earnings

Desired Outcome

Washington's workforce achieves a family-wage standard of living from earned income.

Postprogram earnings are very much affected by the characteristics of the participants who entered the program. Participants in programs serving youth had the lowest postprogram hourly wages and quarterly earnings, and participants in programs serving adults had the highest postprogram wages and earnings.[6] (See Figure 12.)

Earnings and hourly wages were particularly high for individuals who participated in apprenticeship. In addition to the quality of the program, this finding reflects the length of the training and the labor market in their occupations and industries. JTPA Title III participants also had relatively high earnings and wages, reflecting the greater work experience of the program's participants.

In most programs, hourly wages and quarterly earnings were higher, even after controlling for inflation, than were found two years ago. For example, the median earnings of former community and technical college students increased by

[5] Among students leaving school in 1995-96, 77 percent were either in employment reported to Employment Security or enrolled in a 2- or 4-year college during the third quarter after exit. Among students leaving in 1997-98, the rate was 74 percent.

[6] It is not valid methodologically to subtract the wage levels in Figure 2 from those in Figure 12 to obtain a measure of pre-post changes in hourly wages.

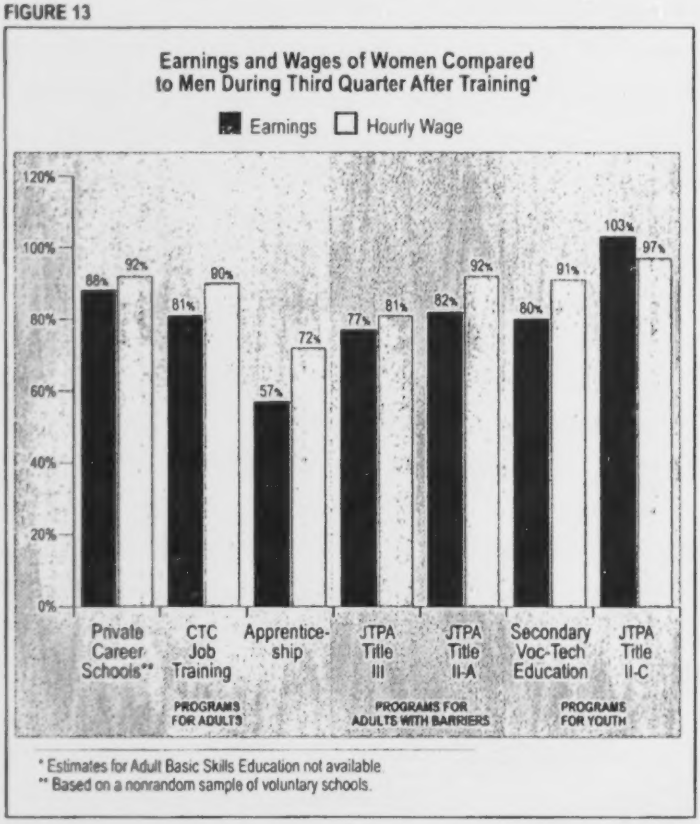
14 percent. Earnings were 22 percent higher among participants in programs for adults with barriers to employment.

Among the 1997-98 JTPA Title III and apprenticeship participants, however, median wages and earnings were lower than reported two years ago. In the case of Title III, the decline is largely due to substantial changes in dislocated workers' industry of origin. A major portion of the 1995-96 participants were from the aerospace industry (38 percent), and a substantial proportion (31 percent) who returned to employment were in aerospace, where earnings are relatively high. Among the 1997-98 participants, less than 2 percent were originally employed in aerospace.

In the case of apprenticeship, the decline is associated with the declines in the completion rate and with the lower outcomes for those who do not complete their programs. Median earnings and wages for 1997-98 apprenticeship *completers* were almost the same, in constant dollars, as those *completers* in 1995-96. However, the apprenticeship completion rate dropped from 42 percent to 35 percent. In addition, those who dropped out prior to graduation spent less time in training, only 8 months instead of the 11 months of training received by dropouts in 1995-96. With fewer completions and shorter training for the noncompleters, chances for apprentices to enter the high-wage construction industry jobs appear to have been reduced. Among apprentices in the 1995-96 cohort, 48 percent worked in construction industry jobs in the third quarter after exit, and fewer than 25 percent in the lower paying trade and services sectors. Among 1997-98 apprentices, only 43 percent were working in the construction industry 3 quarters after exit, and 32 percent were working in the trade and services sectors.

For most programs, postprogram earnings and hourly wages were lower for women than for men who participated in the same program. (See Figure 13.) Earnings also tended to be lower for people of color than for whites. Racial and ethnical

FIGURE 13



* Estimates for Adult Basic Skills Education not available.
** Based on a nonrandom sample of voluntary schools.

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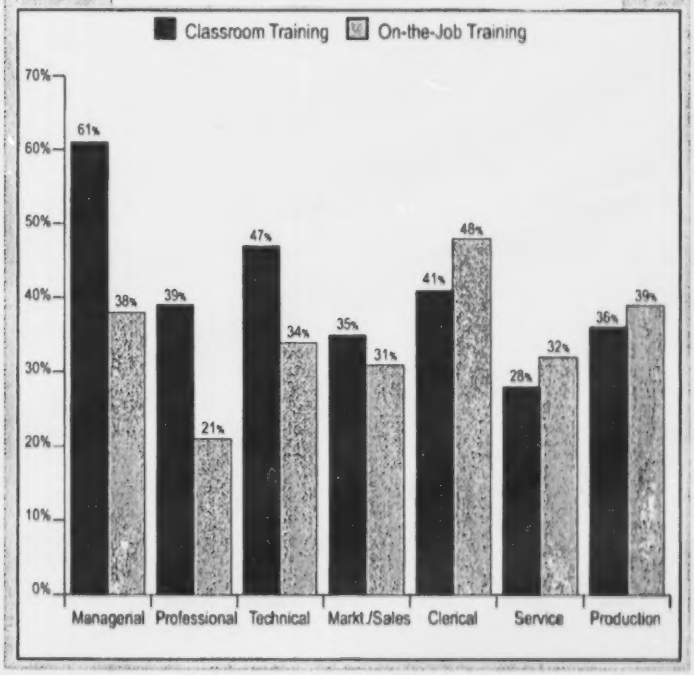
differences varied considerably among programs, although for many programs wages and earnings tended to be lower for Native Americans. These differences in postprogram wages and earnings by gender and race/ethnicity generally reflected differences in wages and earnings prior to program enrollment and differences in the overall labor market.

FIGURE 14

Percentage of Employees Who Received Classroom and On-the-Job Training by Job Type
(at least 4 hours in the last 12 months)



Employer-Provided Training

Training that employers offer or support for their own employees is a major part of the training that occurs in the state (and is defined in statute as part of the state training system). The Workforce Board estimates that employer expenditures on training are roughly equivalent to the amount of public expenditures on workforce development.

Based on our 1999 survey of Washington employers, almost half (49 percent) provided or paid for at least 4 hours of classroom training for some employees. Most employers (85 percent) provided on-the-job training within the last 12 months, and 26 percent had tuition reimbursement programs for their employees.

The extent of training has been increasing. Thirty-eight percent of firms said the percentage of their workers who received classroom training increased during the past three years, and the most frequently cited reason for the increase was technological change.

The 1999 employer survey found, as have previous state and national surveys, employers are more likely to provide classroom training to managerial than to nonmanagerial employees. On-the-job training, however, is provided most frequently to clerical workers and as frequently to production workers as to managers. (See Figure 14.)

There are three broad categories of classroom training—training in job-specific skills, workplace skills, and basic skills. Employers most frequently provided training in job-specific skills (training to upgrade or extend employee skills or to qualify them for a specific occupation). Forty-one percent of all firms provided such training. Thirty-three percent of employers provided training in workplace practices (such as diversity, sexual harassment, safety, and teamwork training). In contrast, only 6 percent of employers provided basic skills instruction (reading, writing, math, and English language skills). (See Figure 15.)

When employers wanted to improve the skills of their employees, most did not turn to the public sector to provide training. More frequently, they used their own personnel or private training vendors. (See Figure 16.) However, among firms who used a community and technical college for job-specific training, 48 percent were very satisfied, and 45 percent were somewhat satisfied with the training their employees received.

Employers who had never used community or technical colleges for employee training were asked what their main reasons for not doing so were. Most said they did not need community and technical college training because they used their own personnel. Of the employers, 51 percent said community and technical colleges did not offer the type of training their employees needed, 37 percent said the cost would be too high, and 34 percent said they were not aware of what training colleges offer.

FIGURE 15

Percentage of Employers Providing Classroom Training to any Employee
(at least 4 hours in the last 12 months)

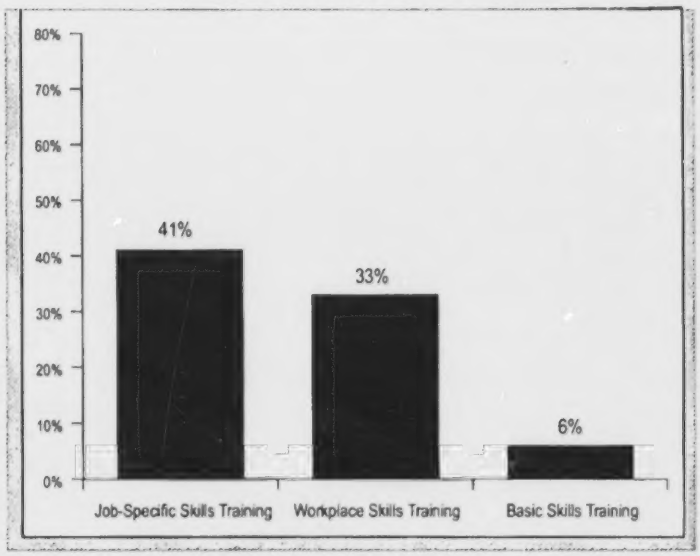
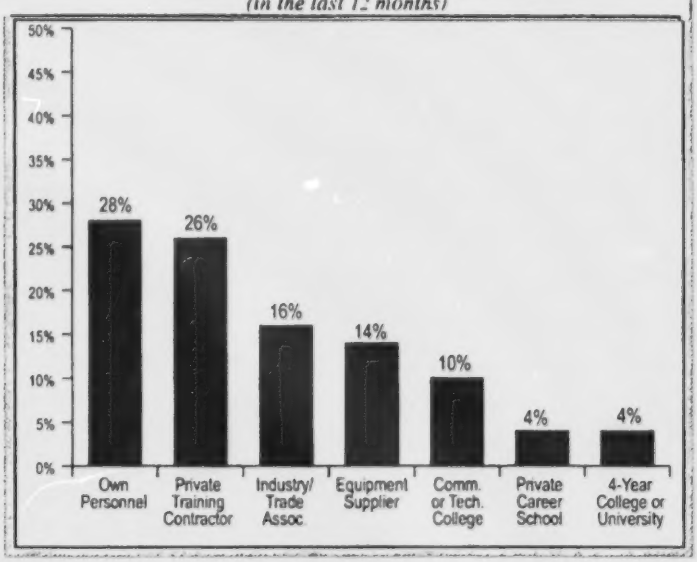


FIGURE 16

Percentage of Employers Using Various Training Providers for Job-Specific Classroom Training
(in the last 12 months)



Areas of Strength and Areas for Improvement

Several areas of strength stand out across the training system. Participant satisfaction was generally quite high. The majority of participants who received job-specific skills training reported their skills improved a lot. Most participants who required support services had their needs met. Employment rates, wages, and earning were, for the most part, higher than those found in our last evaluation.

Across the training system, there are other areas that are weaker and should be targeted for improvement. (See Figure 17.) Employer satisfaction levels are not as high as they should be. Employers are least satisfied with general workplace skills—teamwork, problem-solving skills, communication, work habits, acceptance of supervision, and adaptability to change. Also, employers were not satisfied with the occupational skills of one out of every four new workers who had completed one of the programs.

The support services that most often need to be improved are information about job openings and career counseling. Relatively few participants needed child care assistance. Among those that did, however, many reported their needs were not met.

Most programs also have more work to do if they are to eliminate gender differences in labor market outcomes. Prior to enrolling in their programs, most women had lower wages and earnings than did men who enrolled in the same programs. After leaving their programs, most women were still paid less than men who had participated in the same programs. Such gender differences, however, do exist in the overall labor market.

Finally, training provided by employers to their own employees is also an important part of the training system. Employers should do more to provide training to production and service workers and basic skills instruction to employees with low literacy and math skills.

FIGURE 17

Areas for Improvement

Programs for Adults

COMMUNITY AND TECHNICAL COLLEGE TRAINING	PRIVATE CAREER SCHOOLS	APPRENTICESHIP	JTPA TITLE III DISLOCATED WORKERS
Employer Satisfaction	Employer Satisfaction	Employer Satisfaction	Employer Satisfaction
General Workplace Skills	General Workplace Skills	General Workplace Skills	General Workplace Skills
Job Opening Information	Job Opening Information	Child Care Assistance	Job Opening Information
Career Counseling	Career Counseling	Gender Differences	Career Counseling
Child Care Assistance	Gender Differences	Overall Completion Rate	Child Care Assistance
Gender Differences		People of Color Retention	Gender Differences
Native Americans			

Programs for Adults With Barriers to Employment

ADULT BASIC SKILLS EDUCATION	JTPA TITLE II-A
Employer Satisfaction	Employer Satisfaction
General Workplace Skills	General Workplace Skills
Communication Skills	Basic Skills
Support Services	Job Opening Information
Job Opening Information	Career Counseling
Career Counseling	Child Care Assistance
Child Care Assistance	Gender Differences
Relatedness to Work	Native Americans

Programs for Youth

SECONDARY VOCATIONAL-TECHNICAL EDUCATION	JTPA TITLE II-B SUMMER YOUTH	JTPA TITLE II-C YOUTH
Employer Satisfaction	Basic Skills	Employer Satisfaction
General Workplace Skills		General Workplace Skills
Basic Skills		Basic Skills
Job-Specific Skills		Child Care Assistance
Gender Differences		Targeting Higher Paying Jobs

Community and Technical Colleges Job Training

Thirty-four community and technical colleges provide job training throughout the state. In general, this training provides students with the skills required for specific occupations. Job training, also referred to here as vocational education, includes the dislocated worker retraining program.[1] It does not include students who intend to transfer to a four-year college or university or students who enroll in a program to raise their basic skills to a high school level. Also not included are working adults taking a few classes to improve skills for their current jobs.

Information was obtained on 22,389 vocational students who completed or otherwise left a community or technical college during the 1997-98 school year.[2] Of these, 13,847 (62 percent) were defined as "completers" because they received a vocational certificate, obtained a degree, or completed 45 or more credits.[3] Typically, students enrolled for about 2 years with a median of 7 quarters for all students and 9 quarters for completers.

The study includes information from student college enrollment records and the Employment Security Department (ESD) wage files from Washington, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included. In addition, 1,441 of the students completed a telephone survey during the fall of 1999, providing additional data on employment and their satisfaction with the training.

Participant Characteristics

The 22,389 former students in our study include a higher proportion of African-Americans and Asian/Pacific Islanders than does the state adult population as a whole. (See Figure 1.) They also included proportionately fewer Whites. Fifty-seven percent of the students are women.

[1] Worker retraining program participants are included in this evaluation. They were not included in our previous evaluations.

[2] In order to be included in this study, students had to have identified themselves as vocational students and have either enrolled for six or more vocational credits or have completed three or more vocational credits.

[3] The definition of completer has been changed. In previous versions of the *Workforce Training Results* a community and technical college job training exiter was defined as a completer only if they received a certificate or degree. The current definition of completer includes *exiters that have completed 45 or more credits*, even if they have not received a certificate or degree. Among those defined as completers for this study, 9,578 (or 69 percent) received a vocational certificate or degree.

FIGURE 1

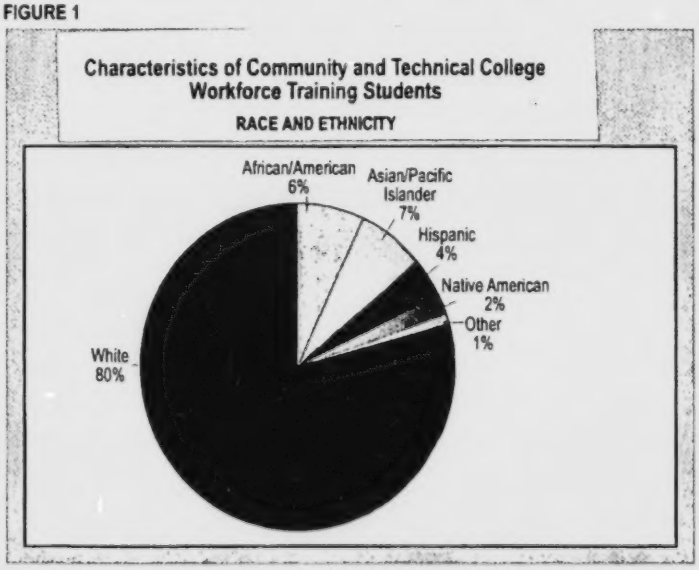
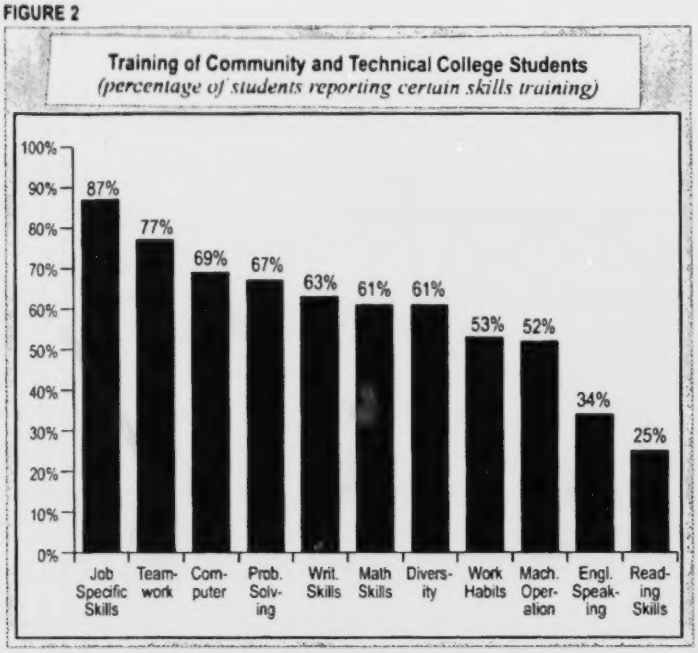


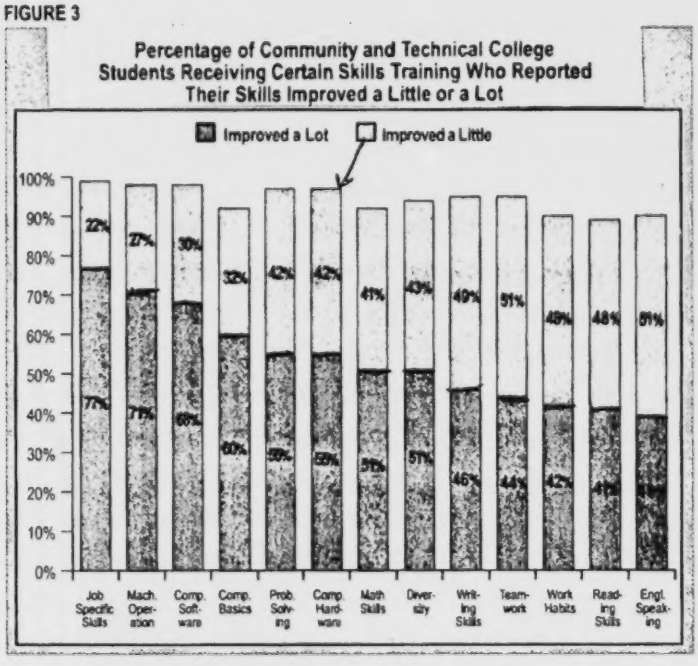
FIGURE 2



When they enrolled, 53 percent had not previously attended college, 26 percent had attended college without receiving a credential, and the remaining 21 percent had a certificate or degree, including 8 percent with baccalaureate degrees. Upon leaving their training programs, only one third of the students were under the age of 25, about 30 percent were between 25 and 35 years old, and 37 percent were over age 35.

Nearly half (47 percent) of the students had employment reported to ESD in the third quarter before enrolling in college. Their median hourly wage at this time was at $8.35 per hour, and they worked a median 382 quarterly hours, resulting in annualized earnings of $12,708.

FIGURE 3



Competency Gains

The primary goal of workforce training and education is to provide individuals with the skills and abilities required in the workplace. College vocational students mirrored this purpose in their survey responses: the most common reason vocational students cited for enrolling in college was to "get skills for a new job" (84 percent).

Based on survey results, 87 percent of the students received training in specific job skills, and 77 percent of those reported these skills improved "a lot." (See Figures 2 and 3.) Between 52 and 77 percent of the students received education or training in machinery operation, work habits, diversity, math, writing, problem solving, computer, and teamwork skills.

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Between 42 and 71 percent of the students who received training in these areas said their skills had improved a lot, while only 2 to 10 percent believed their skills did not improve at all (the remainder said their skills improved a little). These results are similar to those found in the 1997 survey.

Among students employed 6 to 9 months after leaving the program, 73 percent stated that the education and job training they received were related to their job. Among those who completed their training, 80 percent reported it was related to their job. These findings are comparable to the 1997 survey results.

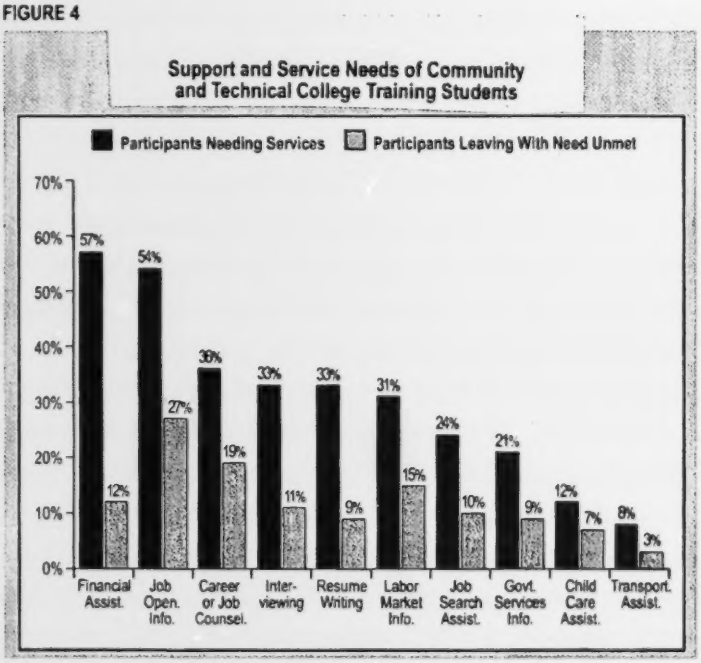
A higher proportion of women than men complete degrees or certificates by about 10 percentage points (47 percent as opposed to 37 percent). Completion rates based on degrees, certificates, plus receiving 45 or more credits were somewhat more even (64 percent for women; 60 percent for men). Men were more likely than women to receive training in the operation of machinery (57 percent to 48 percent). However, the gap has narrowed since 1997 when 70 percent of men, and only 36 percent of women received such training.

Participant Satisfaction

Former students were generally satisfied with their college program with 90 percent reporting they were very or somewhat satisfied with the program as a whole. This is virtually the same level of satisfaction as reported in our 1997 survey. Satisfaction with overall training quality, instruction, equipment, facilities, length of program, and usefulness for their career all were close to or above 90 percent. Of the students surveyed, 86 percent were satisfied with the opportunities to interact with instructors. Overall, 90 percent reported they had met their educational objectives (of these, 50 percent reported they had definitely met their educational objectives). All of these results were essentially comparable to the 1997 survey.

Students were also asked about support services related to their college training. The services most frequently needed were financial assistance (57 percent) and information about job openings (54 percent). Roughly one-third of students required assistance with career counseling, interviewing, resume writing, and labor market information. (See Figure 4.)

FIGURE 4

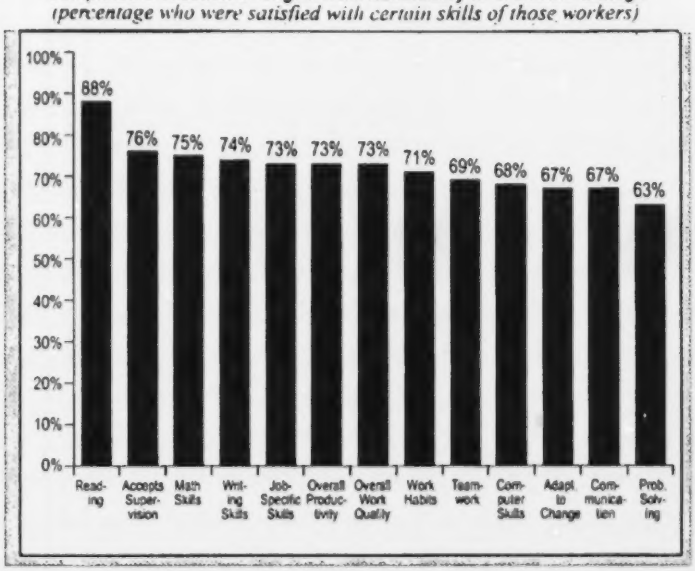


Female students were much more likely than male students to report needing child care assistance (16 percent to 5 percent), though the need is small for both groups.

Most students received the support services needed. Students requiring financial assistance, job opening information, and career or job counseling each increased by about 10 percentage points over the levels reported 2 years ago. The colleges did well in keeping up with the demand for financial assistance; only 12 percent reported their financial assistance needs were not met. However, 27 percent said their job counseling needs were not met. Among the relatively few who required child care assistance, less than half had their needs met.

FIGURE 5

Employer Satisfaction With New Employees Who Recently Completed a Vocational Program at a Community or Technical College
(percentage who were satisfied with certain skills of those workers)



Employer Satisfaction

The Workforce Board's employer survey, *Workforce Training Needs and Practices of Washington State Employers 1999*, asked firms to evaluate new employees who had recently completed a vocational program at a community or technical college. Three hundred and fifty employers provided such an evaluation. Of these employers, 73 percent said they were either somewhat or very satisfied with the overall quality of work and the overall productivity of these new employees. This is higher than the 1997 survey results. In 1997, 60 percent of employers said they were satisfied with the overall quality of work.[4] (See Figure 5.)

Employers tended to rate new workers highly in terms of reading, writing, math, and job-specific skills. They reported less satisfaction with teamwork skills, computer skills, adaptability to change, communication, and problem-solving skills. However, satisfaction with these skills has increased since 1997, and differences in levels of satisfaction across the skill categories are much less pronounced than in the earlier survey.

[4] Two factors complicate drawing comparisons between the two surveys. First, the 1997 survey did not include employers with less than five workers, whereas the recent survey does. In fact, the inclusion of smaller firms does not explain the reported rise in overall satisfaction with the quality of work. Estimated employer satisfaction levels do not change significantly when small firms are excluded from the analysis. Second, our confidence in the earlier survey results is constrained by the relatively low response rates and small sample sizes in 1997.

Employment and Earnings

According to the survey responses, 83 percent of all 1997-98 college vocational students were employed during the period 6 to 9 months after leaving their program. (See Figure 6.) For program completers, the rate was 87 percent. To find out more about the former student postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain information only on those individuals with employment reported for unemployment insurance purposes (85 to 90 percent of the total employment in state, with self-employment being the largest type of employment not covered).

FIGURE 6

Employment and Earnings of Community and Technical College Job Training Students in the Third Quarter After Leaving Program

	1995-96 ALL	1997-98 ALL	1997-98 COMPLETERS [5]
Percentage self-reporting employment when surveyed	81%[6]	77%	81%
Percentage self-reporting employment during the third quarter after leaving program	86%	83%	87%
Percentage with employment reported by employers to ESD the third quarter after leaving program[7]	62%	74%	78%
Median quarterly hours worked, of those working	452	462	467
Mean quarterly hours worked, of those working	405	416	423
Percentage employed full-time of those working (averaging 30 or more hours/week)	63%	62%	64%
Median annualized earnings of those working[8]	$17,108	$19,480	$20,512
Median annualized earnings of those working and not enrolled in further education		$19,600	$20,914
Size of household which median earnings would support at poverty level[9]	4.1	5.0	5.4
Size of household which median earnings would support at twice poverty level	1.1	1.5	1.7
Median hourly wage of those working	$10.01	$10.83	$11.18
Percentage self-reporting receipt of medical benefits from employer	67%	65%	
Percentage self-reporting receipt of pension benefits from employer	44%	43%	

[5] The definition of completer has been changed. In previous versions of the *Workforce Training Results* a community and technical college job training exiter was defined as a completer only if they received a certificate or degree. The current definition of completer includes those receiving a certificate or a degree *and exiters that have completed 45 or more credits.* The results for 1997-98 are not very sensitive to this change in definition. According to the new definition, 78 percent of completers had reported employment, and their median quarterly earnings were $5,128. According to the old definition, which included only degree or certificate holders, 80 percent of completers had reported employment, and their median quarterly earnings were $5,212.

[6] Note that the survey results for 1995-96 are based on only 208 responses. The differences in the percentages self-reporting employment (both when surveyed and during the third quarter after leaving the program) between 1995-96 and 1997-98 are not statistically significant.

[7] Employment data were obtained from matches with ESD wage files from Washington State, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match.

[8] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars.

[9] The federal poverty guidelines are as identified by the Department of Health and Human Services. The 1999 guidelines are used.

Record matches found that 74 percent of the 1997-98 vocational students reported employment during the third quarter after they left their program. This is substantially higher than the 62 percent reported for 1995-96 program exiters. The median wage of those leaving programs in 1997-98 was $10.83 per hour, and they worked a median 462 hours during the third quarter.[10] They had median annualized earnings of $19,480. Again, this is an increase over the results for two years ago.[11]

According to record matches, 11 percent of former students were employed in manufacturing industries, including aerospace, and 16 percent were employed in the health care industry. Among former students, 22 percent were employed in small firms (with fewer than 20 workers), another 22 percent were medium sized firms (with 20 to 99 workers), and 56 percent were in large firms (with 100 or more workers).

Limiting our analysis to those students who completed their program, the outcomes are higher. For example, 78 percent of the 1997-98 college vocational completers were found to have employment reported to ESD during the third quarter after they left their program. The median wage of completers with reported employment was $11.18 per hour. They worked 467 hours (median) per quarter, and they had median annualized earnings of $20,512. If the analysis is further limited to only those who were not enrolled in further schooling, the median annualized earnings increases to $20,914.

In order to examine the wage distribution of former students, we determined where they fall in terms of the wage distribution for all Washington workers. ESD has defined thresholds that divide workers, on a full-time equivalent (FTE) basis, into quintiles based on their hourly wages.[12] The percentage of participants who had hourly wages in the third quarter post-program in each quintile of Washington workers was:

Lowest 20% of workers	23%
Second 20% of workers	37%
Middle 20% of workers	24%
Fourth 20% of workers	13%
Highest 20% of workers	4%

[10] All wages and earnings are stated in first quarter 1999 dollars.

[11] Part of the increase in the median wage rate is due to the fact that dislocated worker retraining program participants are included in this year's evaluation, whereas they were not two years ago. If this group were excluded, the median wage for 1997-98 vocational students would be $10.65, instead of $10.83.

[12] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of FTEs, rather than in terms of numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. ESD determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles. These results are not comparable to those reported two years ago.

During the third quarter after leaving their program, the typical (median) student with reported employment had sufficient earnings to support a household of 5.0 persons above the poverty level. Using a higher income standard, the typical employed student earned enough to support 1.5 persons at a "family wage" of twice the poverty level.

Earnings varied by gender and race-ethnicity. Among those with employment reported to ESD during the third quarter after leaving the program, male students earned 24 percent more than female students, due to working more hours (9 percent more) and earning hourly wages 11 percent higher. Native American students were the least likely to have employment reported to ESD of any racial-ethnic group studied at seven percentage points below the overall rate for other students. The rates for African-American students were four percentage points below the average for other ethnic groups. These patterns are similar to those found two years ago for students who left postsecondary vocational programs in 1995-96.

It is important to note, when evaluating these differences, that similar gender and racial ethnic differences existed in students' employment and earnings before they entered college. Community and technical college vocational training was followed by increased earnings, work hours, and wage rates for all groups.

According to survey responses, 65 percent of those with a job at 9 months after leaving their program received medical benefits as part of their employment, with 43 percent reporting receipt of pension benefits. Fifteen percent of the students reported receiving some form of public assistance during the past twelve months (either Temporary Assistance to Needy Families (TANF) or Food Stamps). These results are similar to those reported two years ago.

Areas for Improvement

Overall, a large majority of students were satisfied with their college training program. After training, most students obtained jobs that paid a decent wage. Postprogram employment, earnings, and wages were higher than found in the previous evaluation.

There are, however, areas that could be improved. Employer satisfaction levels were lowest for SCANS skills (e.g., work habits, teamwork skills, adaptability to change, and problem-solving skills). Satisfaction levels were higher than those reported in our last evaluation, but improvement needs to continue.

A higher percentage of students reported receiving computer training than did so two years ago, and employer satisfaction with the computer skills of new employees also increased. However, efforts in this area need to continue.

Thirty percent of employers still report that they are not satisfied with these skills.

Whereas 77 percent of students reported that their job-specific skills had improved a lot, a quarter of employers were not satisfied with these skills. Reported employer satisfaction with job-specific skills was lower than two years ago.

Most students received the support services needed, and the colleges did well in keeping up with the demand for financial assistance. However, many students said their needs for job counseling were not met, and, among the relatively few who required child care assistance, less than half had their needs met.

Finally, the colleges might do more to eliminate differences in the labor market outcomes for women. However, it is important to note that gender differences existed in student employment and earnings before they entered college, and training was followed by increased earnings for both men and women.

Private Career Schools

Private career schools are independent businesses that provide students with training in a variety of occupations. There are nearly 300 private career schools in Washington; together they provide between 150 and 175 different instructional programs to approximately 35,000 students each year. No public funds are appropriated for private schools, but eligible students may:

1. Obtain federal grants and loans to pay for educational expenses if the school they choose has been authorized to participate in federal student aid programs.
2. Secure funding under the state's Worker Retraining Program.
3. Use "Individual Training Account" vouchers, funded under Title I-B of the federal Workforce Investment Act (WIA).

There are 250 private, certificate-granting vocational institutions licensed by the Workforce Board. Eight private schools grant associate or baccalaureate degrees and are regulated by the Higher Education Coordinating Board. The state's 55 cosmetology schools are regulated by the Department of Licensing and are not included in this study.

There is no central data file on private career school students. Therefore, it was necessary to ask the schools to volunteer information on their students (the Federation of Private Career Schools and Colleges encouraged member schools to participate). Nineteen private career schools in twenty-nine locations throughout the state, including some of the larger vocational schools, submitted information on their students.

This sample represents a small fraction of the private career schools. The schools in the sample, however, include approximately 26 percent of private career school students in the state. Of the 19 schools that responded, 2 are among the degree-granting schools located in the state.

Over 70 percent of the sample for this study are from schools that teach computer skills, primarily for office applications. Such schools constitute only about 10 percent of all private career schools in the state and enroll only 21 percent of private career school students. The sample is, therefore, atypical of private schools. Except for employer satisfaction, findings reported here represent results for only the 19 responding schools and cannot be generalized to all private career schools. Because the sample of schools is different than that obtained two years ago, direct comparison cannot be made between these results and the results reported in our evaluation of 1995-96 participants.

Information was obtained on 4,155 students who left private career school programs during 1997-98. The median length of enrollment for these students was seven months.

The study includes information from student enrollment records and the Employment Security Department (ESD) wage

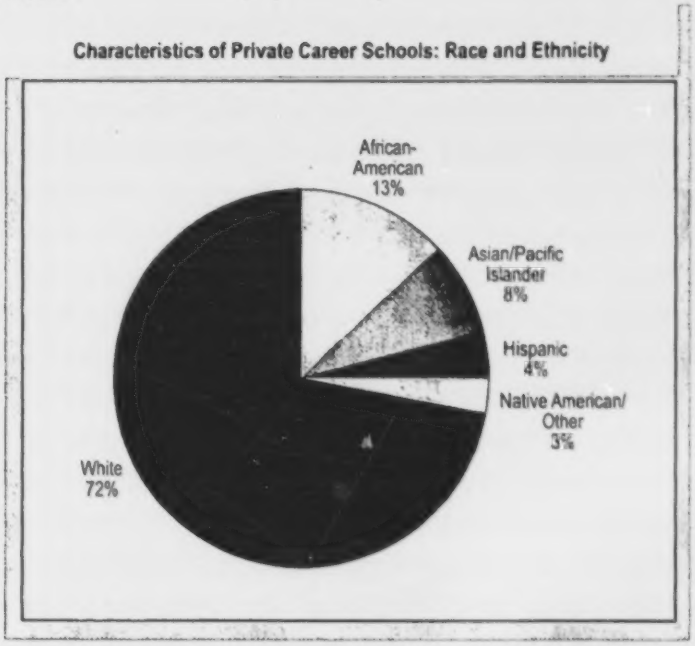
files from Washington, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included. ESD records contain wage and hours of work for approximately 85 to 90 percent of in-state employment. The records do not contain information for those who are self-employed. In addition, 177 of the students responded to a telephone survey conducted during the fall of 1999, providing additional data on employment and satisfaction with training.

Participant Characteristics

Participating private career school students were generally more diverse than the state population in terms of both race-ethnicity and gender.[1] (See Figure 1.) Of the private career students, 28 percent were people of color, compared to 17 percent for the state population as a whole. All racial-ethnic groups (except Hispanics, who make up 4 percent of private career schools' population) had higher representations in the private career schools surveyed than in the state population. The percentage of African-Americans in private career schools is particularly noteworthy: the percentage of African-Americans enrolled in the private career schools studied was four times the percentage of African-Americans represented in the state population. The percentage of women students was about as high as any other program studied (67 percent). Three quarters of the students were in the 22 to 44 age bracket, with half between 25 to 38 years of age.

FIGURE 1

Characteristics of Private Career Schools: Race and Ethnicity



Based on survey responses, 95 percent of enrollees at the private career schools studied had a high school diploma or a GED. Just over one half had some postsecondary enrollment. One out of five had a postsecondary certificate or degree.

Half of the students had employment reported to ESD in the third quarter before enrolling in their programs. They worked a median of 375 hours per quarter, had a median wage of $7.25 per hour, resulting in median annualized earnings of $10,864.[2]

[1] Some participating schools did not supply race-ethnicity information on their students. These statistics are based on the 93 percent of participants for whom race and ethnicity were reported.

[2] All wages and earnings are stated in first quarter 1999 dollars.

Competency Gains

According to the survey, almost all students indicated they entered a private career school to acquire skills for a new job (94 percent). Students also said they enrolled for personal enjoyment (85 percent) or to finish a degree (55 percent.) While enrolled, most students received training in specific job skills, teamwork skills, computers, and work habits. (See Figure 2.)

Students often said their skills improved substantially. Most reported their job-specific skills, ability to operate machinery, computer software skills, and knowledge of computer basics had improved a lot. (See Figure 3.) They were less likely to report that problem solving, writing, work habits, and teamwork skills improved a lot. Among those employed after training, 68 percent stated that their job was related to the training they received at a private career school.

Participant Satisfaction

On the whole, former students were satisfied with their private career school training. Eighty-three percent reported that their educational objectives were met (thirty-four percent said their objectives were definitely met). Students were satisfied with the length of the program (92 percent), facilities (90 percent), the quality of teaching (85 percent), the amount of student-teacher interaction (81 percent), and the usefulness of the program to their career (73 percent). Overall, 76 percent said they were satisfied with their program.

FIGURE 2

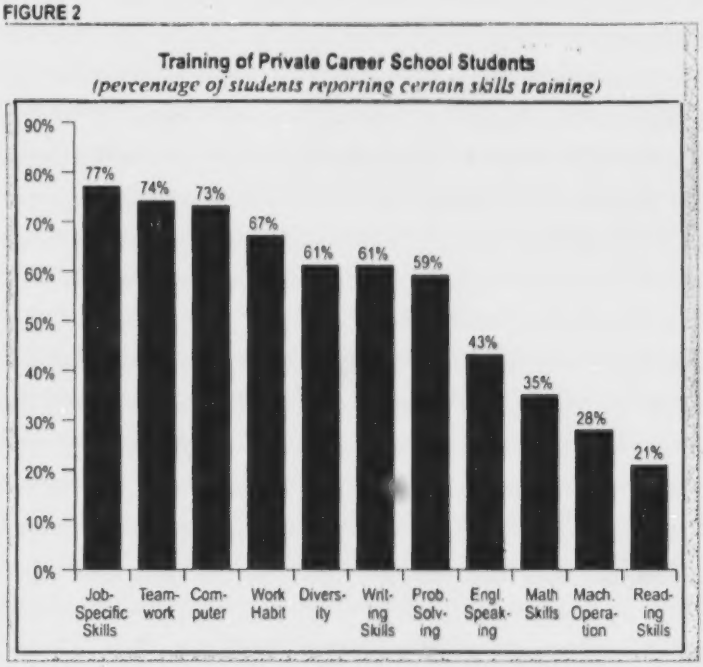


FIGURE 3

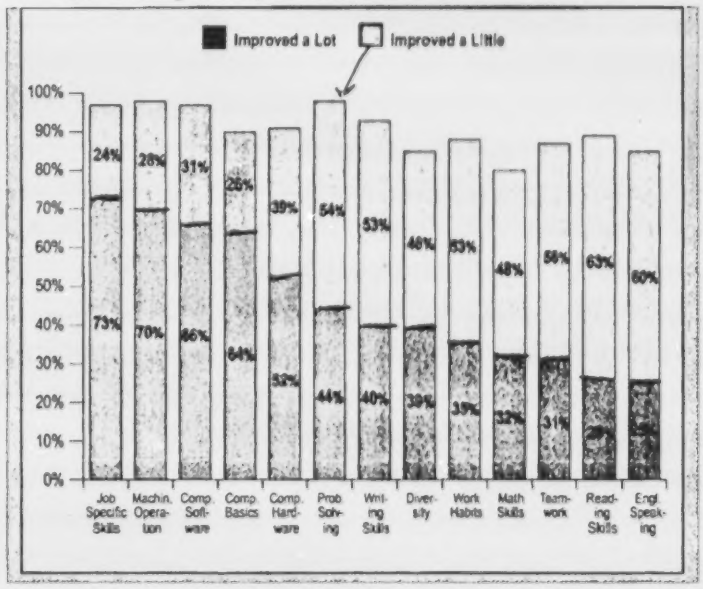


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FIGURE 4

Support Service Needs of Private Career School Students

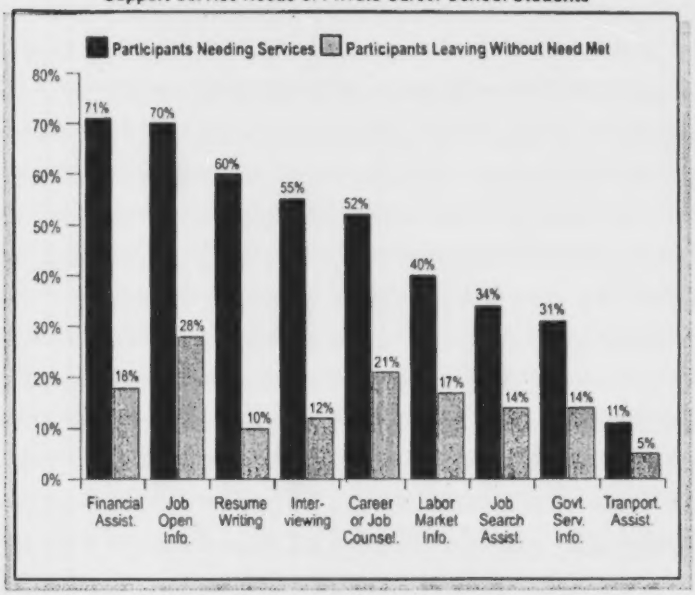
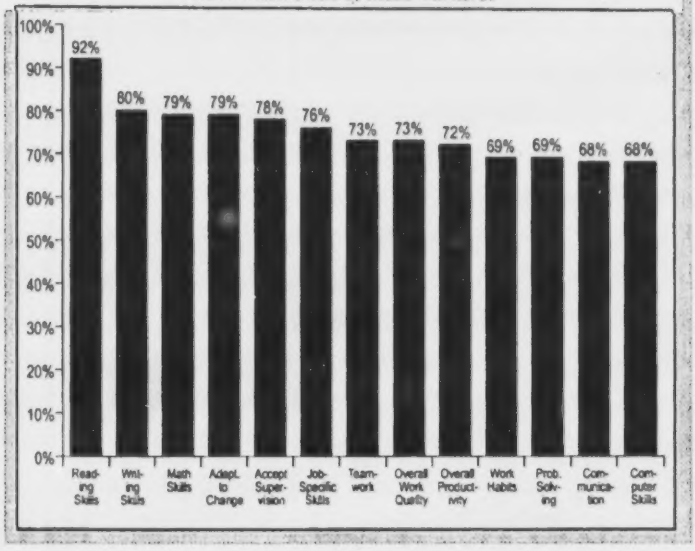


FIGURE 5

Employer Satisfaction With New Employees Who Had Recently Completed a Private Career School Program
(percentage who were very or somewhat satisfied with certain skills of those workers)



Students reported needing some key support services as part of their private career school education. Of these students, 71 percent needed financial assistance, 70 percent needed information about job openings, and 60 percent required help with resume writing. In most cases, services were provided. However, many students reported that their need for information on job openings (28 percent) and career counseling (21 percent) was not met. (See Figure 4.)

Employer Satisfaction

The Workforce Board's employer survey, *Workforce Training Needs and Practices of Washington State Employers 1999*, asked firms to evaluate new employees who had recently completed a program at a private career school: 73 percent said they were satisfied with the overall quality of work of these new employees, and 72 percent were satisfied with their overall productivity. (See Figure 5.) This response for employer satisfaction is an improvement over the 1997 survey results. In 1997, only 52 percent of employers said they were satisfied with the overall quality of work of such employees.[3]

[3] Two factors complicate drawing comparisons between the two surveys. First, the 1997 survey did not include employers with fewer than five workers, whereas the recent survey does. In fact, the inclusion of smaller firms does not explain the reported rise in overall satisfaction with the quality of work. Estimated employer satisfaction levels do not change significantly when small firms are excluded from the analysis. Second, our confidence in the 1997 survey results is constrained by the relatively low response rate and small sample size.

Employers rated new workers' skills highly in several areas. Most often rated highly were new workers' basic skills (reading, writing, and math), adaptability to change, and acceptance of supervision. Employers reported less satisfaction with new workers' work habits, problem-solving skills, and computer and communication skills.

Employment and Earnings

According to survey responses, 87 percent of the 1997-98 private career school students were employed during the period 6 to 9 months after leaving their program. (See Figure 6.)

FIGURE 6

Employment and Earnings of Private School Students in the Third Quarter After Leaving Program

	1995-96		1997-98	
	ALL	COMPLETERS	ALL[4]	COMPLETERS
Percentage self-reporting employment when surveyed	78%	80%	80%	82%
Percentage self-reporting employment during the third quarter after leaving program	82%	84%	87%	89%
Percentage with employment reported by employers to ESD the third quarter after leaving program[5]	55%	58%	72%	75%
Median quarterly hours worked, of those working	437	448	448	480
Mean quarterly hours worked, of those working	383	396	392	434
Percentage employed full-time of those working (averaging 30 or more hours/week)	58%	62%	56%	65%
Median annualized earnings of those working[6]	$15,012	$15,632	$15,612	$17,604
Size of household which median earnings would support at poverty level[7]	3.4	3.6	3.6	4.3
Size of household which median earnings would support at twice poverty level	0.9	0.9	0.9	1.2
Median hourly wage of those working	$8.62	$8.63	$8.92	$9.86
Percentage self-reporting receipt of medical benefits from employer	61%		68%	
Percentage self-reporting receipt of pension benefits from employer	33%		33%	

[4] Our sample includes 4,155 former students. Among these, 1,281 were reported to have completed their programs of study, and 228 were reported to not have been completers. The completion status of the remaining 2,637 students was not reported.

[5] Employment data were obtained from matches with Employment Security Department wage files from Washington State, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match.

[6] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars. Note that restricting the analysis only to those who are working and not enrolled in school does not significantly change the earnings or wage rates of former private career school students.

[7] The federal poverty guidelines identified by the Department of Health and Human Services. The 1999 guidelines are used.

To find out more about former student postprogram employment and earnings, we matched student records with ESD wage files from Washington and neighboring states. These files contain information on only those individuals with employment reported for unemployment insurance purposes (85 to 90 percent of in-state employment).

Based on these matches, 72 percent of the 1997-98 private career school students were found to have employment reported to ESD during the third quarter after they left their program. The median wage for this group was $8.92 per hour. Forty-five percent reported employment in the service sector (nineteen percent in business services, nine percent in health services). Twenty percent were employed in retail trade, eight percent were employed in transportation and utilities, and seven percent in manufacturing and aerospace industries.

Limiting our analysis to only those students who had ***completed*** their private career school program by receiving a degree or certificate, the outcomes are higher. Seventy-five percent of the 1997-98 private career school completers had employment reported to ESD during the third quarter after they left their program. The median wage of completers with reported employment was $9.86 per hour.

In order to examine the wage distribution of former students, we determined where they fall in terms of the wage distribution for all Washington workers. ESD has defined thresholds that divide Washington's workers into quintiles based on their hourly wages.[8] The percentage of participants who had hourly wages in the third quarter post-program in each quintile of Washington workers is shown below.

Lowest 20% of workers	37%
Second 20% of workers	43%
Middle 20% of workers	15%
Fourth 20% of workers	4%
Highest 20% of workers	1%

The third quarter after they left their private career school training, the typical (median) employed student had sufficient earnings to support a household of 3.6 persons above the poverty level. The typical student earned enough to support about one person at a "family wage" of twice the poverty level.

According to the survey responses, 68 percent of those employed had health benefits provided by their employer, and 33 percent received pension benefits. Eight percent reported they belonged to a union. Nineteen percent reported they received some form of public assistance

[8] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of full-time equivalents (FTEs), rather than in terms of numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. The Employment Security Department determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles.

during the previous twelve months, either Temporary Assistance to Needy Families (TANF) or food stamps.

Earnings varied by both gender and race-ethnicity. In general, men earned more than women by working more hours at higher hourly rates, a gap found both among noncompleters and graduates. Trends by ethnic group are somewhat obscured by the inability of some schools to report their students' ethnicity. The "Unknown Race" had the highest wage rates, hours, and earnings studied; their median wage was $9.35 per hour. Hourly wage rates for Asian/ Pacific Islanders ($9.13) and for Hispanics ($9.09) also exceeded the median hourly wages for white students ($8.95). Native Americans, on the other hand, tended to have the lowest hourly rates, hours worked, and earnings; their median wage was $8.32 per hour.

Areas for Improvement

In considering the evaluation of private career schools, the reader must keep in mind that most of the results are based on a small nonrandom sample of schools that volunteered to take part in the study. One should not assume that results are typical of private career schools in general. (Since the schools participating in the study were different than in the previous Workforce Board evaluation of private career schools, no comparison is made with the earlier evaluation.)

Most of the students from the schools in the study reported they were very satisfied with their training, they were employed, their training was related to their employment, and their training increased their job-specific skills a lot. Nearly a quarter of employers, however, were not satisfied with the job-specific skills of recent private career school graduates.

Based on the student and employer survey responses, the schools could do more to improve general workplace skills. Students were less likely to report substantial improvements in problem solving skills, work habits, teamwork skills, and basic (writing and math) skills than in other types of skills. Nearly a third of employers were not satisfied with the work habits, problem solving, computer and communication skills of their employees who had recently completed a private career school program.

Access to support services is generally very high. However, a substantial number of students reported their need for information on job openings and career counseling was not met.

Finally we need to expand data collection beyond a small sample of voluntary schools. The Workforce Board is working with the assistance of the Federation of Private Career Schools to collect data from all the private schools licensed by the Workforce Board or the Higher Education Coordinating Board.

Apprenticeship

Apprenticeship in Washington is governed by the Washington State Apprenticeship and Training Council and administered by the Department of Labor and Industries. Apprenticeship combines classroom studies with extensive on-the-job training under the supervision of a journey-level craft person or trade professional. Apprentices receive wages, health, pension, and other benefits while learning occupational skills. Applicants are required to be least 16 years old (18 for construction trades), and most apprenticeships require at least a high school diploma or GED for entrance.

For this study, administrative records were obtained for 3,220 participants who left an apprenticeship program during the 1997-98 year. Of these participants, 1,135 graduated from their apprentice program. One hundred and sixty-seven former apprentices responded to our telephone survey during the fall of 1999.

Both completers and noncompleters spent a significant amount of time in their apprenticeship program. Overall, apprentices spent a median of 17 months in their program. Completers put in even more time (a median of 41 months), and even those who left an apprentice program without completing still spent a median of 8 months in the program. The median length of apprenticeship has dropped somewhat since the 1995-96 year when it was 25 months.

Participant Characteristics

Prior to beginning their program, over 40 percent of the future apprentices we studied were employed in relatively good-paying jobs. Among those employed in the third quarter before their program, the median wage—$10.03 per hour—was second only to participants of the JTPA Dislocated Worker program among the 9 programs we studied.[1] Of those apprentices who had employment records 9 months before and 9 months after training, many were working in the same industry before and after training (33 percent overall and 52 percent for completers).[2] These figures suggest many apprentices were working in a related, skilled occupation before seeking training to achieve a journey-level credential.

The apprenticeship participants were more diverse than the state population in terms of race and ethnicity, except for Asian/Pacific Islanders who were under-represented. (See Figure 1.) Both African-Americans and Native Americans were represented at twice their proportion of the state population. Apprenticeship programs disproportionately register more men than women; only 13 percent of the participants ending an apprenticeship in 1997-98 were women. The typical age at which apprentices entered their programs was quite high. The median age at enrollment was 27 years.

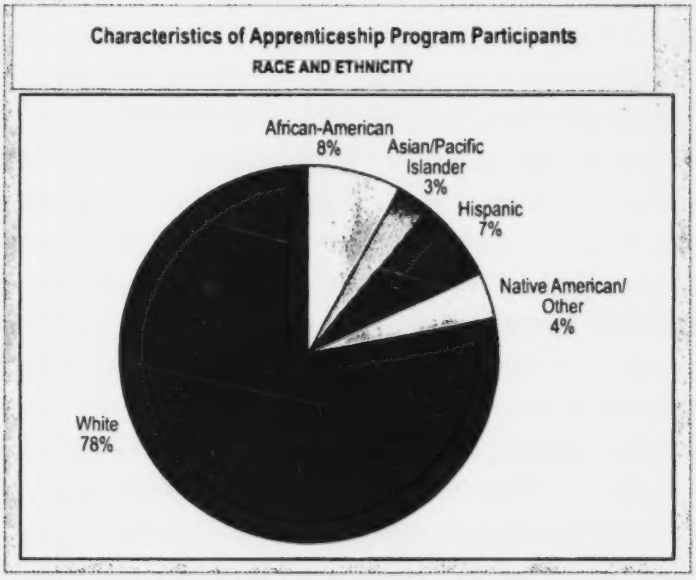
[1] All wages and earnings are reported in first quarter 1999 dollars.

[2] This is based upon using a four-digit SIC code, which identifies hundreds of types of industries.

When we limit our analysis to only those students who graduated from their program, we see further differences by race-ethnicity and gender. The vast majority of apprenticeship graduates, as might be expected from enrollment patterns, are white. As a group, Asian/Pacific Islander apprentices have the highest apprenticeship completion rates, followed by Whites. Other racial-ethnic groups have noncompletion rates that are on average 30 percent higher than the White and Asian/Pacific noncompletion rate. As a result, among graduates, all racial-ethnic groups move closer to their state population proportions, except Hispanic apprentices, who fall to slightly below their state population rates. Whites shift to their state population rate among the graduate populations, and both African-American and Native American apprentice graduates remain above their respective state population rates, though less so than in the program as a whole. Still under represented, women make up only 12 percent of apprenticeship completers.

People of color who did not complete their apprenticeship spent, on average, less time in the program before leaving than whites who did not complete (white noncompleters dropped out after about 9 months; the people of color who did not complete dropped out at just over a median of 6 months). Lastly, women noncompleters invested over 12 months in their apprenticeship program before dropping out, compared to the overall median of 7 months for male noncompleters.

FIGURE 1



Competency Gains

By definition, people enter an apprenticeship program to acquire occupation- or industry-specific training. Apprentices receive both classroom and on-the-job training, so our survey asked apprentices about their experience with both. Former apprentices reported receiving training in specific job skills (86 percent in classroom training and 85 percent on-the-job), operation of machinery (74 percent classroom and 82 percent on-the-job), math skills (68 percent classroom and 37 percent on-the-job), and teamwork skills (68 percent classroom and 61 percent on-the-job). Only 26 percent said they received any classroom computer training. However, this is a substantial improvement over the 1997 survey results when only 13 percent reported such training. (See Figure 2.)

When they received training, former apprentices reported their skills improved a lot in specific job skills (67 percent reported their skills improved a lot from the classroom, and 84 percent reported their skills improved a lot from on-the-job training) and in the operation of machinery (59 percent classroom and 80 percent on-the-job). Fewer reported substantial improvements in work habits (38 percent classroom and 58 percent on-the-job) and teamwork skills (37 percent classroom and 48 percent on-the-job). (See Figure 3.)

Among former apprentices who were employed when surveyed, 87 percent said their apprenticeship training was related to their job. The figure jumps to 91 percent when surveying only those who completed their apprenticeship program.

Participant Satisfaction

Survey results indicate that participants were, on the whole, satisfied with their apprenticeship program: 92 percent said they met their educational objectives by participating in the training (of these, 52 percent said their educational objectives were definitely met). And, 86 percent of participants reported they were satisfied with the overall quality of the program. This is virtually the same percentage reported in the 1997 survey. Of former apprentices, 93 percent were satisfied with the facilities and 90 percent with the usefulness of the training to their career, and 88 percent were satisfied with their opportunities to interact with teachers, the equipment used in training, and the quality of teaching in their program.

FIGURE 2

Training of Apprenticeship Program Participants
(percentage of partipants reporting certain classroom skills training)

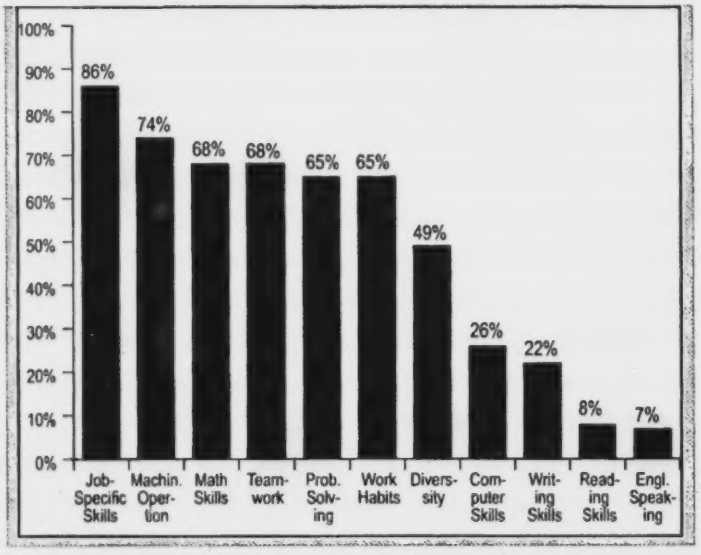


FIGURE 3

Percentage of Apprenticeship Participants Receiving Certain Skills Training Who Reported Their Skills Improved a Little or a Lot Due to Classroom Training

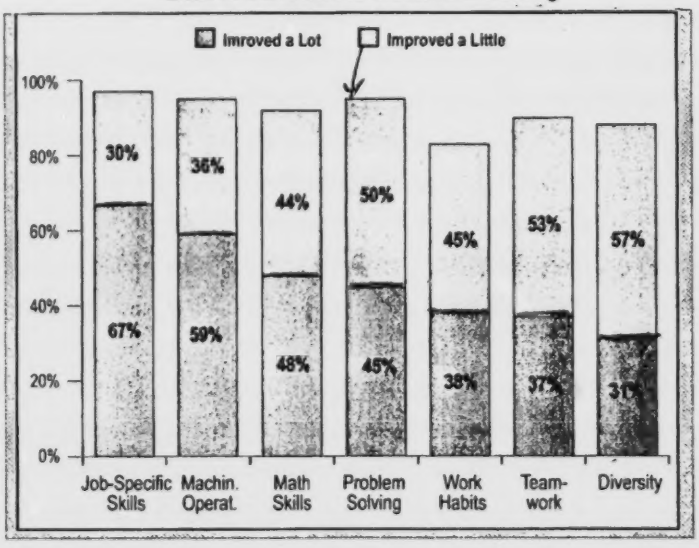


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FIGURE 4

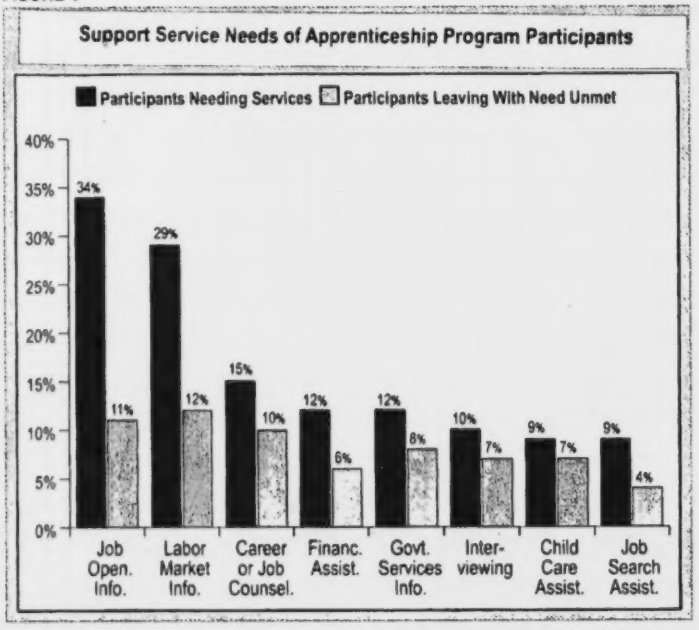
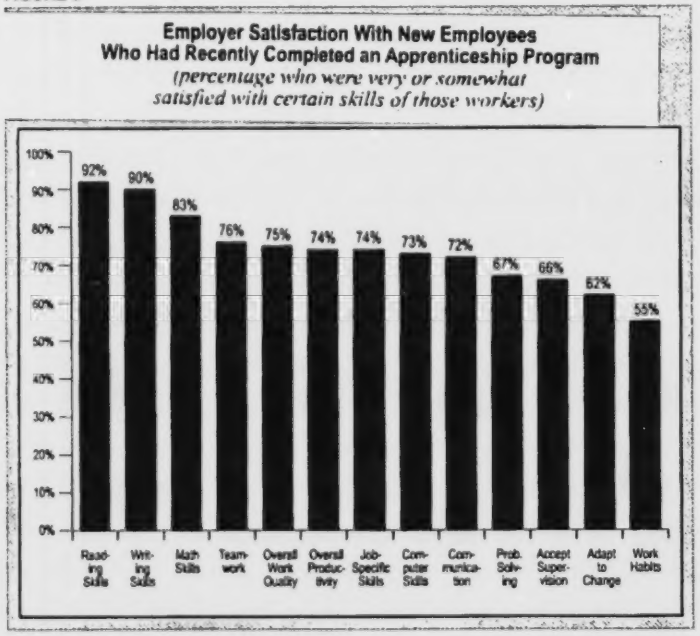


FIGURE 5



Apprentices reported a much lower need for support services than other groups we studied. Their greatest needs were for information on job openings and labor market information, and most of those who required these services received them. (See Figure 4.) Few apprentices needed child care assistance. However, among those that did, few had their needs met.

Employer Satisfaction

The employer survey asked firms to evaluate new employees who had recently completed an apprenticeship program. Since relatively few employers felt they were in a position to evaluate these workers, the findings on employer satisfaction should be treated with caution. Of the employers, 75 percent said they were either somewhat or very satisfied with the overall quality of work of these new employees.[3] Seventy-four percent were satisfied with the workers' overall productivity. (See Figure 5.)

Employers rated new workers' skills highly in most areas. There were two major exceptions. Employers were less satisfied with their work habits and their ability to adapt to change.

Employment and Earnings

Economic outcomes for apprenticeships are higher than for any other program we studied. In addition to the quality of

[3] Employer satisfaction levels were not reported in 1997 because of small sample sizes.

apprenticeship training and the wage levels in these occupations, this result may be partly due to the relatively long length of the program. Even apprenticeship noncompleters have higher earnings and rates of employment than completers of other programs.[4]

[4] The high proportion of noncompleters working in related fields suggests the positive outcomes for this group may be due to the training received in their apprenticeship program.

According to survey results, 93 percent of apprentices reported being employed 9 months after leaving training. (See Figure 6.) According to ESD records, 64 percent of former apprentices had reported employment during the third quarter after they left the program. (ESD wage files include between 85 to 90 percent of the employment in Washington.) Based on record matches, the median wage of former apprentices the third quarter after they left their program was $16.59 per

FIGURE 6

Employment and Earnings of Apprenticeship Program Participants in the Third Quarter After Leaving Program

	1995-96		1997-98	
	ALL	COMPLETERS	ALL	COMPLETERS
Percentage self-reporting employment when surveyed	88%	94%	87%	89%
Percentage self-reporting employment during the third quarter after leaving program	93%	n/a	93%	96%
Percentage with employment reported by employers to ESD the third quarter after leaving program[5]	68%	84%	64%	75%
Median quarterly hours worked, of those working	455	477	456	480
Mean quarterly hours worked, of those working	405	444	406	434
Percentage employed full-time of those working (averaging 30 or more hours/week)	63%	74%	58%	66%
Median annualized earnings of those working[6]	$28,264	$41,604	$26,792	$41,796
Size of household which median earnings would support at poverty level[7]	8.1	12.8	7.6	12.9
Size of household which median earnings would support at twice poverty level	3.1	5.5	2.8	5.5
Median hourly wage of those working	$18.02	$23.53	$16.59	$23.90
Percentage self-reporting receipt of medical benefits from employer	81%		83%	
Percentage self-reporting receipt of pension benefits from employer	72%		78%	

[5] Employment data were obtained from matches with ESD wage files from Washington State, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match.

[6] Based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars. Note that restricting the analysis only to those who are working and not enrolled in school does not substantially change the estimated earnings and wage rates of former apprentices.

[7] The federal poverty guidelines as identified by the Department of Health and Human Services. The 1999 guidelines are used.

hour. Limiting our analysis to just those apprentices who completed their program, 96 percent said they were employed, 75 percent had employment reported to ESD, and the median wage was $23.90 per hour.

The percentage with reported employment is lower than that found in our last evaluation. The median earnings of 1997-98 apprenticeship completers were almost the same, in constant dollars, as that for completers in 1995-96. However, the median earnings for all apprentices were roughly 5 percent lower among 1997-98 apprentices than they had been among those who left training 2 years earlier. Several factors may contribute to this. First, the apprentices who left their programs in 1997-98 were less likely to have been employed before enrolling and had lower wages in their pretraining jobs than the apprentices who left in 1995-96. Second, the apprenticeship completion rate dropped from 42 percent to 35 percent. In addition, those who dropped out prior to graduation spent less time in training, only 8 months instead of the 11 months of training received by dropouts in 1995-96.

With fewer completions and shorter training for the noncompleters, chances for apprentices to enter the high-wage construction industry jobs appear to have been reduced. Among apprentices in the 1995-96 cohort, 48 percent worked in construction industry jobs in the third quarter after exit, and fewer than 25 percent in the lower paying trade and services sectors. Among 1997-98 apprentices, 43 percent were working in the construction industry three quarters after exit, and 32 percent were working in the trade and services sectors. The proportion working in manufacturing, another high-wage sector, remained unchanged at 12 percent.

This shift in employment outcomes would not have been predicted based on the trades for which apprentices were trained. Enrollment in construction trades apprenticeships was actually higher among 1997-98 apprentices than in 1995-96.

The third quarter after they left their apprenticeship program, the typical (median) participant had sufficient earnings to support a household of 7.6 persons above the poverty level. Using a higher income standard, the typical participant earned enough to support 2.8 persons at a "family wage" of twice the poverty level. Among completers, the numbers are even higher. The typical participant could support 12.9 persons above the poverty level and 5.5 persons at twice the poverty level.

In order to examine the wage distribution of former students, we determined where they fall in terms of the wage distribution for all Washington workers. ESD has defined thresholds that divide Washington's workers into quintiles

based on their hourly wages.[8] The following shows the percentage of participants who had hourly wages in the third quarter postprogram in each quintile.

Lowest 20% of workers	11%
Second 20% of workers	19%
Middle 20% of workers	19%
Fourth 20% of workers	28%
Highest 20% of workers	23%

According to the survey responses, 83 percent of those employed had health benefits provided by their employer, and 78 percent received pension benefits. Seventy-eight percent of former apprentices said their job at nine months following their training was a union job; the highest union participation of any of the programs studied.

Earnings varied by race-ethnicity and gender. Women earned only 57 percent as much as their male counterparts due to fewer hours worked and lower hourly wages. This distinction was even more pronounced for apprenticeship completers, with female apprenticeship completers working fewer hours than either male or female noncompleters.[9] Nonwhite apprentices also had lower earnings. Earnings among African-American apprentices were 34 percent below those of their White counterparts. Earnings of Hispanic and Native American apprentices were 25 percent below, and earnings of Asian/Pacific apprentices were 6 percent below those of White apprentices. Nonwhite dropouts earned only 77 percent of what white dropouts earned in the third quarter after exit. This difference virtually disappeared among apprenticeship completers with nonwhite completers earning 97 percent as much as their White counterparts. We found no significant differences in rates of employment by gender or race-ethnicity.

Prior to entering apprenticeship training, there were similar differences in wages and earnings by gender and minority status. Comparing differences before and after training, it appears that most minorities narrowed their gap in overall earnings. While the gender gap in employment and earnings narrows for those who completed an apprenticeship, it widened among noncompleters.

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[8] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of FTEs, rather than in terms of numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. ESD determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they would count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles.

[9] The wage and earnings differences may reflect different trades studied by women and men.

Areas for Improvement

The results for apprenticeship training are quite positive. Median earnings and wages were relatively high, most participants were very satisfied with their overall training, most were employed, and almost all believed their training was related to their employment.

Apprenticeships provide training for specific occupations and industries. Most former participants said their job-specific skills improved substantially. Perhaps more could be done to improve general workplace skills. Fewer than half of former participants reported that their math, problem solving, work habits, and teamwork skills improved a lot. Employers, who were generally satisfied with the skills of former apprentices, were less satisfied with their problem-solving skills, ability to accept supervision, adaptability to change, and work habits.

Most participants were very satisfied with most aspects of their training. Support services do not appear to be a major issue for apprenticeship participants since relatively few reported needing support services other than information about job openings. Child care may be an important exception. Relatively few participants (9 percent) reported needing this service. However, among those that did, most did not have their needs met.

The area most clearly needing improvement is that of gender differences. Relatively few women participated in the program. Only 13 percent of participants and 12 percent of completers were women. Moreover, after completing an apprenticeship, women had less than half (48 percent) the earnings of men. Apprenticeship should also address the relatively high, and increasing, dropout rates. Particular attention should be paid to the higher dropout rates among minority participants, especially among Hispanics and the somewhat lower earnings of African-Americans and Hispanics after completing their apprenticeship.

Job Training Partnership Act Title III for Dislocated Workers[1]

Job Training Partnership Act Title III served a more limited population than other programs included in this study. It was restricted to what are commonly referred to as "dislocated workers." Individuals were eligible if their employment had been terminated (or they had received a notice of termination) due to a permanent closure or substantial layoff at a plant or facility. Individuals were also eligible for Title III if they were eligible for unemployment compensation (or had already exhausted their benefits) and had few prospects for returning to their previous occupation or industry. When considering the outcomes from one year to another, it is important to remember that a major portion of program funding was made up of individual grants (National Reserve Grants) awarded on the basis of major plant closures or layoffs. As a result, the total funding level and the specific industries served by this program fluctuated from year to year.

As in other JTPA programs, Title III offered a variety of training and employment-related services. These included occupational training, basic skills instruction, and job search assistance such as career counseling, resume preparation, and job referrals. Occupational training occurred either at a training institution such as a community or technical college, a private vocational school, or at a worksite itself. The Employment Security Department (ESD) administered the program at the state level. It was administered by 12 service delivery areas at the local level. Each service delivery area was headed by a private industry council, which either provided services directly or purchased services from other providers in partnership with local elected officials.

For this study, program records were obtained on 6,812 individuals who left JTPA Title III during the 1997 program year (July 1, 1997, to June 30, 1998).[2] Employment-related information was then obtained through a match with ESD wage files (representing 85 to 90 percent of in-state employment). In addition, 1,902 former participants responded to a telephone survey conducted during the fall of 1999.

On the average, participants were in the program for about twelve and one-half months. There was, however, considerable variation in the amount of time participants spent in the JTPA Title III program. Some received only job search and/or relocation assistance, while others enrolled in longer retraining programs.

[1] This report is based upon JTPA programs in place during the time period July 1, 1997, to June 30, 1998. On July 1, 2000, the Workforce Investment Act replaced JTPA.

[2] This population partially overlaps with dislocated workers who received training at the community and technical colleges funded by the Worker Retraining Program under ESHB 1988 and with dislocated workers who received extended unemployment benefits under the Timber Retraining Benefits program.

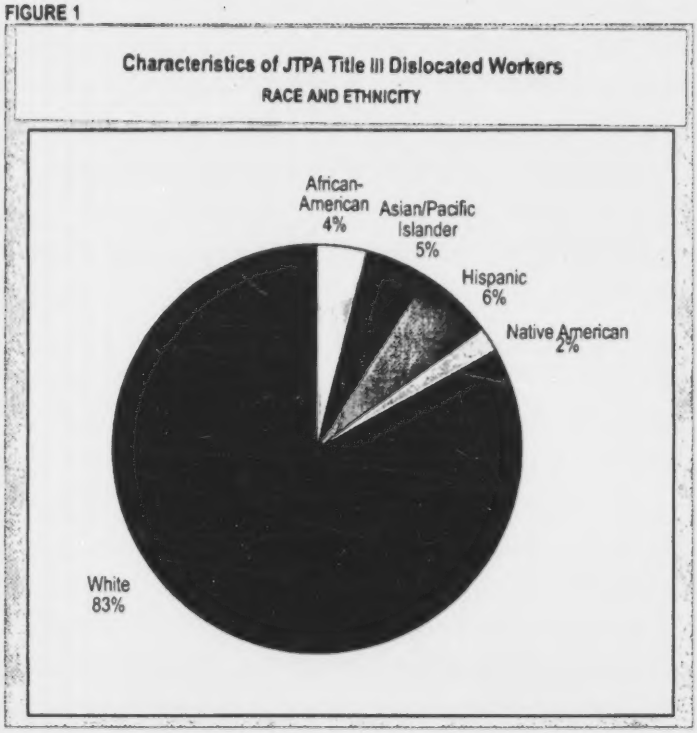
Participant Characteristics

In some ways, participants in the JTPA Title III program were a relatively homogenous group due to the program's eligibility requirements. To be eligible, participants must have received a layoff or dislocation notice from a job *to which the worker was unlikely to return.* Participants mirrored the state's racial-ethnic adult population distribution. (See Figure 1.) Fifty-six percent of JTPA Title III participants were men.

Two-thirds of the participants were between the ages of 25 and 48, and 23 percent were between 49 and 57. Only 6 percent did not have a high school degree or GED upon entering the program. Roughly two-thirds had some schooling after high school, and one third had a postsecondary certificate or degree.

Prior to losing their jobs, JTPA Title III participants received the highest wages of any group included in this report. Those with reported employment during the third quarter prior to enrollment had a median hourly wage of $13.08. At that time, their median annualized earnings were $24,708.[3]

FIGURE 1



Competency Gains

Given the purpose of the program and participant characteristics, it is not surprising that 87 percent said they entered the program to acquire skills for a new job. According to the survey, 69 percent of the participants received specific job skills training. Of those, 80 percent said the training improved their skills a lot. (See Figures 2 and 3.) In addition, 75 percent received some computer training, a substantial increase over the 62 percent reported in our 1997 survey. Among those who received basic computer skills training, 70 percent felt these skills had improved a lot. Consistent with their relatively high level

[3] All wages and earnings are stated in first quarter 1999 dollars.

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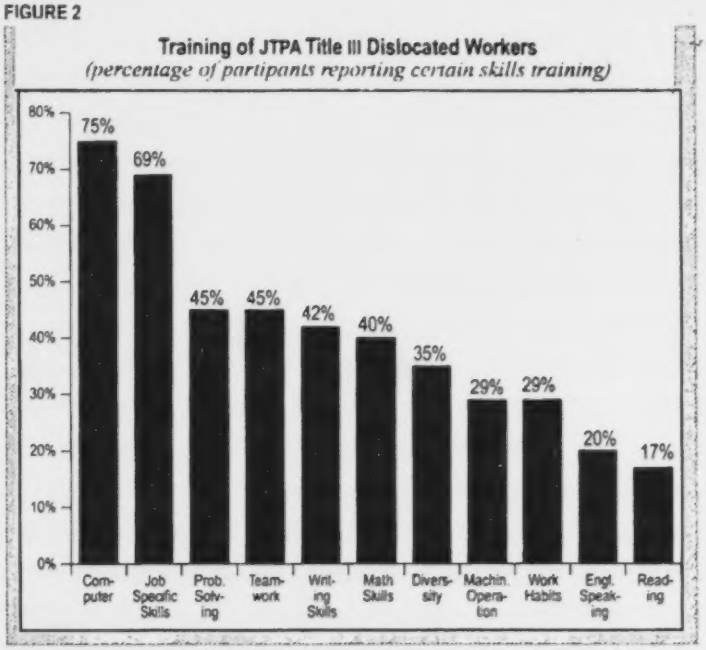
of education, fewer than half of the participants reported receiving instruction in basic skills, 42 percent received training in writing, 40 percent in math, and 17 percent in reading.

In general, males were more likely than females to receive training in the operation of machinery (42 to 13 percent, respectively). Women, on the other hand, were more likely than their male counterparts to receive computer training (82 to 69 percent, respectively).

Among those employed after the program, 68 percent said that their training was related to their job. This is an improvement over the 59 percent reported in the evaluation of 1995-96 participants.

FIGURE 2



Participant Satisfaction

Survey results indicate the participants were mostly satisfied with the Title III program—88 percent said they met their educational objectives for enrolling in the program; of these, 50 percent said they definitely met their educational objectives. And, 88 percent reported overall satisfaction with the program; up from 82 percent in 1997. Ninety percent or more were satisfied with equipment used for training, facilities and buildings, the quality of teaching, the length of the program, and opportunities to interact with instructors.

Support services most frequently needed by participants were information on job openings, financial assistance, career or job counseling, and labor market information. Most of those requiring these

FIGURE 3

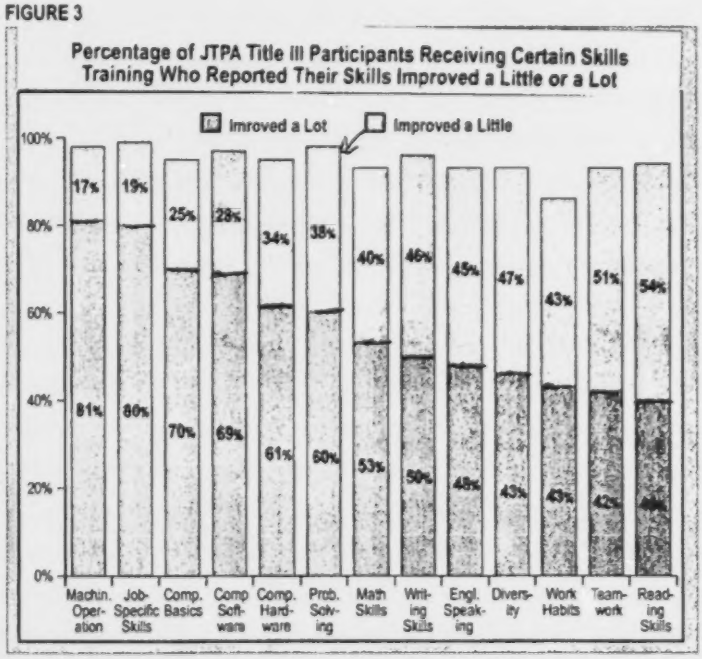


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FIGURE 4

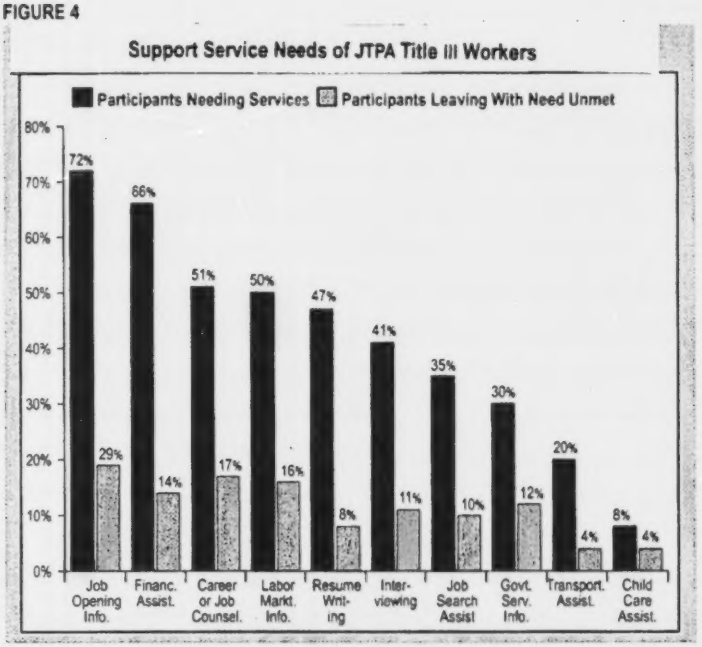
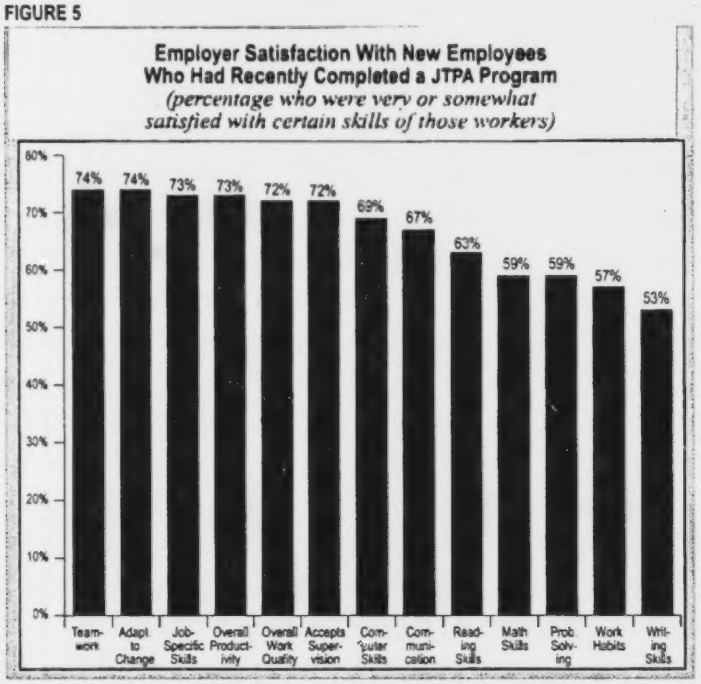


FIGURE 5



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services did receive them. However, 29 percent reported an unmet need for information on job openings. (See Figure 4.)

Employer Satisfaction

It was not feasible to survey employers about each of the four JTPA programs included in the study (Titles II-A, II-B, II-C, and III) separately because there were too few individuals coming out of each program for a sufficient percentage of employers to have had experience employing recent participants. Employers were instead asked about workers who had been trained "by JTPA." This section presents findings on employer satisfaction with new employees who completed any type of JTPA program. Since relatively few employers felt they were in a position to evaluate new employees who had recently completed a JTPA program, the findings on employer satisfaction should be treated with caution.

Overall, the results indicate that the majority of employers were satisfied with the quality and productivity of these workers. Seventy-two percent said they were either somewhat or very satisfied with the overall quality of work of these new employees, an improvement over the sixty-six percent reporting satisfaction in 1997. Seventy-three percent said they were satisfied with the workers' overall productivity. (See Figure 5.)

Most employers were satisfied with these new workers' teamwork skills, adaptability to change, and job-specific skills. They were less likely to report satisfaction with math skills, problem-solving abilities, work habits, and writing skills.

Employment and Earnings

According to survey responses, 83 percent of the 1997-98 JTPA Title III participants had a job during the period 6 to 9 months following their program. (See Figure 6.)

FIGURE 6

Employment and Earnings of JTPA Title III Participants in the Third Quarter After Leaving Program

	1995-96	1997-98
Percentage self-reporting employment when surveyed	85%	78%
Percentage self-reporting employment during the third quarter after leaving program	81%	83%
Percentage with employment reported by employers to ESD the third quarter after leaving program	74%	74%
Median quarterly hours worked, of those working	493	484
Mean quarterly hours worked, of those working	455	440
Percentage employed full-time of those working (averaging 30 or more hours/week)	75%	67%
Median annualized earnings of those working[4]	$25,716	$22,580
Size of household which median earnings would support at poverty level[5]	7.2	6.1
Size of household which median earnings would support at twice poverty level	2.6	2.1
Median hourly wage of those working	$13.69	$12.07
Percentage self-reporting receipt of medical benefits from employer	68%	68%
Percentage self-reporting receipt of pension benefits from employer	38%	42%

[4] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars. Note that restricting the analysis only to those who are working and not enrolled in school does not substantially change the earnings or wage rates for former participants.

[5] The federal poverty guidelines are as identified by the Department of Health and Human Services. The 1999 guidelines are used.

Seventy-four percent were found to have employment reported to ESD during the third quarter after they left the program; the same percentage as found in our evaluation of 1995-96 participants. (ESD wage file includes 85 to 90 percent of the employment in Washington and does not include out-of-state employment.)[6] The median hourly wage for this group was $12.07 during the third quarter after leaving the program.

Compared to two years earlier, the current study found a lower median hourly wage among those employed during the third quarter after leaving the program after controlling for inflation. This decrease in earnings is, at least in part, due to substantial changes in dislocated workers' industry of origin. A major portion of participants exiting the program during 1995-96 were from the aerospace industry (38 percent), and a substantial proportion who found employment were in aerospace (31 percent). Less than 2 percent of those exiting during 1997-98, however, were originally employed in aerospace.

Employment and earnings varied by gender and race-ethnicity. Male participants were found to have earnings about 30 percent higher than their female counterparts, mostly due to higher hourly wages.[7] This was, however, approximately the same gender differential that existed in male and female earnings in the third quarter before they entered the program. In other words, the program did not create gender differences in earnings, nor did the program reduce the differences. Moreover, such gender differences exist in the overall labor market, and Title III participants' extensive work history has a large impact on post-program results.

Asian/Pacific Islander and African-American JTPA Title III participants secured higher earnings than the average JTPA Title III participant did during the third quarter after they left the program. Native Americans, however, earned 7 percent less than Whites during the third postprogram quarter. However, they earned 21 percent less during the third quarter before entering the program. In other words, their wage gap was reduced. The wage gap for Hispanics, before and after program participation, was also reduced. Despite this reduction, the earnings of Hispanic participants during the third quarter after leaving the program were only 69 percent that of Whites. Hispanics tended to work fewer hours, but most of the earnings difference was due to lower wage rates. This is possibly explained, at least in part, by the fact that Hispanic participants were more likely to live in geographic areas with relatively lower wages.

[6] Employment data were obtained from matches with ESD wage files from Washington State, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match.

[7] This is virtually the same earnings gap as was found in our evaluation of the 1995-96 participants.

In order to examine the wage distribution of former students, we determined where they fall in terms of the wage distribution for all Washington workers. ESD has defined thresholds that divide Washington's workers into quintiles based on their hourly wages.[8] The percentage of participants who had hourly wages in the third quarter post-program in each quintile is shown below.

Lowest 20% of workers	15%
Second 20% of workers	34%
Middle 20% of workers	28%
Fourth 20% of workers	15%
Highest 20% of workers	7%

The third quarter after they left the JTPA Title III program, the typical (median) participant had sufficient earnings to support 6.1 persons above the poverty level. Using a higher income standard, the typical participant earned enough to support 2.1 persons at a "family wage" of twice the poverty level.

According to the survey responses, 68 percent of participants employed 9 months after the program had health benefits provided by their employer and 42 percent received pension benefits. These results are similar to those found in our 1997 survey. In the recent survey, 13 percent of JTPA Title III participants reported having a union job, as opposed to 20 percent in the 1997 survey.

Areas for Improvement

JTPA Title III served dislocated workers who in most cases lost a good-paying job. Six to nine months after leaving the program, most of the participants had what many would probably characterize as good wages, although for most, they were not up to the level they once had. Compared to their previous jobs, on average JTPA Title III participants experienced a 9 percent drop in earnings after being dislocated. The difference in participant earnings was primarily due to lower hourly wages after dislocation; there was little difference in actual hours worked.

The 1997-98 participants had lower postprogram hourly wages and earnings than did the 1995-96 participants. This is due, at least in part, to a large decrease in participants coming from and going back to the aerospace industry.

There was little change from the previous evaluation in the percentage of participants reporting receiving various types of skills training. One exception was the reported increase in the

[8] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of FTEs, rather than in terms of numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. ESD determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they would count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles.

percentage reporting computer training. Few participants left the program with their needs for support services unmet. One area for improvement, however, is the provision of information on job openings. Postprogram wages were significantly lower for women than for men. Although this reflects the difference in earnings prior to starting the program and in the overall labor market, JTPA Title III might have been able to do more to improve labor market outcomes for women.

Adult Basic Skills Education

The state's community and technical colleges offer basic skills education to adults whose skills are assessed to be at high school level or below in reading, writing, or math. There are other providers of adult basic skills education, but the colleges provide such instruction for the majority of adult skills students in the state.[1] This report covers only Adult Basic Skills Education at the community and technical colleges. It is also limited to adults who identified employment-related reasons for enrolling in basic skills courses and proceeded to take only basic skills courses at the colleges. Those who took basic skills courses for nonemployment-related reasons are not included. Individuals who took vocational courses in addition to basic skills are included in the chapter on community and technical college job training.

Adult Basic Skills Education includes courses in four categories:

1. Adult Basic Education provides remediation in reading, writing, and mathematics for adults whose skills are at or below the eighth grade level.

2. English-as-a-Second Language provides nontransfer-level instruction at competency levels ranging from beginning to advanced.

3. GED Test Preparation provides instruction in basic academic skills beyond adult basic education for those students whose goal is to pass the high school equivalency examination.

4. High School Completion provides instruction in high school courses for adults who want to earn an adult high school diploma.

For this study, participant records were obtained for 11,421 adults who left an Adult Basic Skills program during the 1997-98 school year and did not return to a community or technical college for at least a year. Their median length of enrollment was two quarters. Employment-related information was obtained from a match with ESD wage files. In addition, 149 former basic skills students completed the telephone survey during the fall of 1999. The survey sample excluded English-as-a-Second Language students due to the lack of funds for interpreters.

Participant Characteristics

Adult Basic Skills students are more diverse and have less education and lower income than either the state general population or other community and technical college students. Not surprisingly, of those with a recorded education level when entering the program, over half did not have a high school diploma or GED,

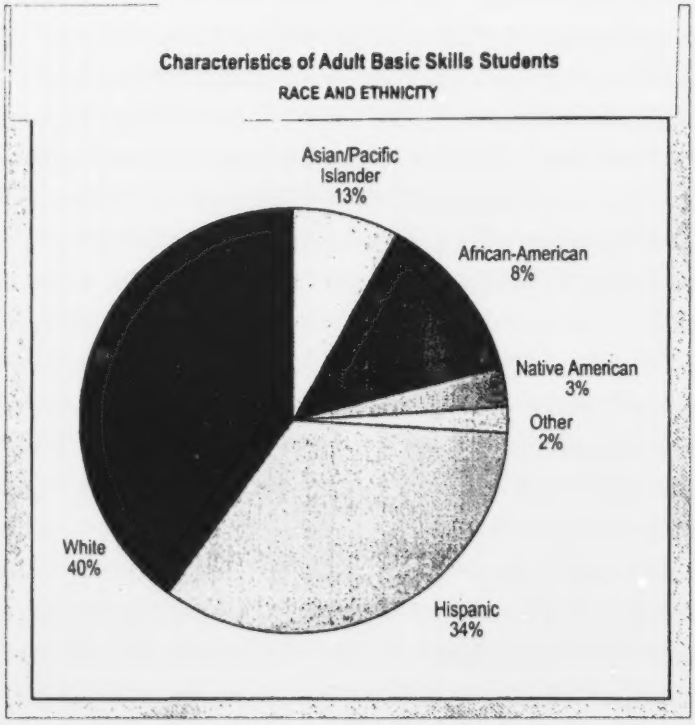
[1] Data is not available for noncollege providers for the 1997-98 year.

compared to 9 percent of Washington adults 18 years of age or older.[2] About 27 percent did have a diploma or GED, and 13 percent had attended some college.

We conducted record matches with the Employment Security Department (ESD) wage files (which includes between 85 to 90 percent of the employment in Washington), ESD wage files in other states, and federal and military personnel records in order to examine earnings and employment levels of adult basic skills students.[3] In the third quarter before program enrollment, only 21 percent had reported employment. The median wage for this group was $7.67 per hour and median annualized earnings were $12,748.[4] Of those with reported employment 3 quarters before their program, about 30 percent were in a service industry, and 23 percent were in retail or wholesale trade.

Of the Adult Basic Skills students, 60 percent were people of color (compared to 17 percent of the state population). And, 34 percent were Hispanic, 13 percent were Asian/Pacific Islander, 8 percent were African-American, and 3 percent were Native American. (See Figure 1.) Proportionately, Hispanics and Asian/Pacific Islanders participated at the highest rates, given their representation in the state population. Fifty-eight percent of participants were male.

FIGURE 1



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Competency Gains

Based on the survey results, 85 percent of basic skills students entered the program to improve their skills or confidence in math, reading, or English speaking. In general, male basic skills students were more likely than their female counterparts to report enrolling in the program to improve their skills for a current job (44 percent to 32 percent, respectively). Students of color were more likely than white students to report enrolling in a basic skills program to improve their reading, math, and English skills.

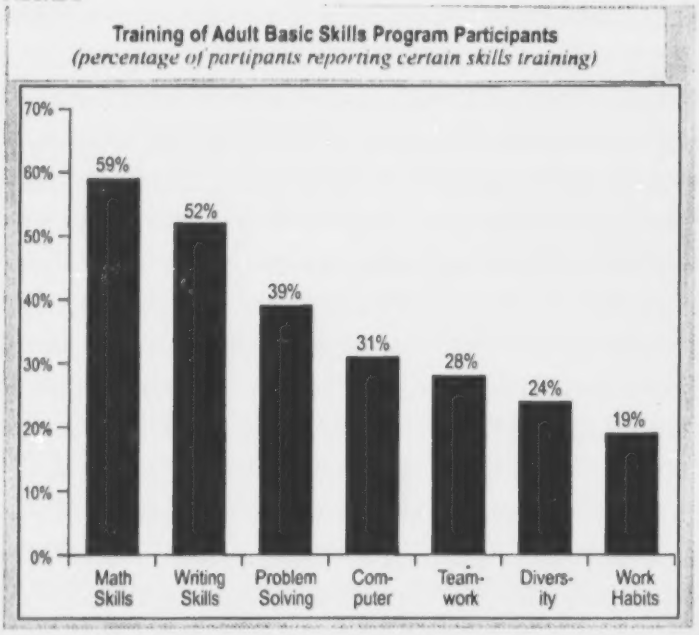
[2] The state estimate is based on data from the 1998 Washington State Population Survey.

[3] Idaho, Montana, Alaska, and Oregon.

[4] All wages and earnings are in first quarter 1999 dollars.

When surveyed during the fall of 1999, 59 percent said they received instruction in math, 52 percent received instruction in writing, and 31 percent received instruction in using computers. (See Figure 2.) Approximately half of the students who reported receiving instruction in computer basics said these skills improved a lot. Only 43 and 34 percent of those who received training in math and writing, respectively, indicated their skills had improved a lot. (See Figure 3.) Among those employed 3 quarters after leaving the program, 42 percent said their job was related to the basic skills training they received; down from 53 percent reported 2 years ago.

FIGURE 2



Participant Satisfaction

In general, students said they were satisfied with the training they received. Ninety percent of former students reported being satisfied with their basic skills instruction overall, and eighty-two percent said they had met their educational objectives. These results are similar to those reported two years ago. The students were more likely to say, however, that their objectives were partially met (43 percent) than definitely met (39 percent). Satisfaction with the quality of teaching, training facilities, and length of training ran at 90 percent or higher.

When asked about support services, students reported most frequently needing information on job openings (needed by 41 percent), resume writing (37 percent) and career counseling (38 percent).

FIGURE 3

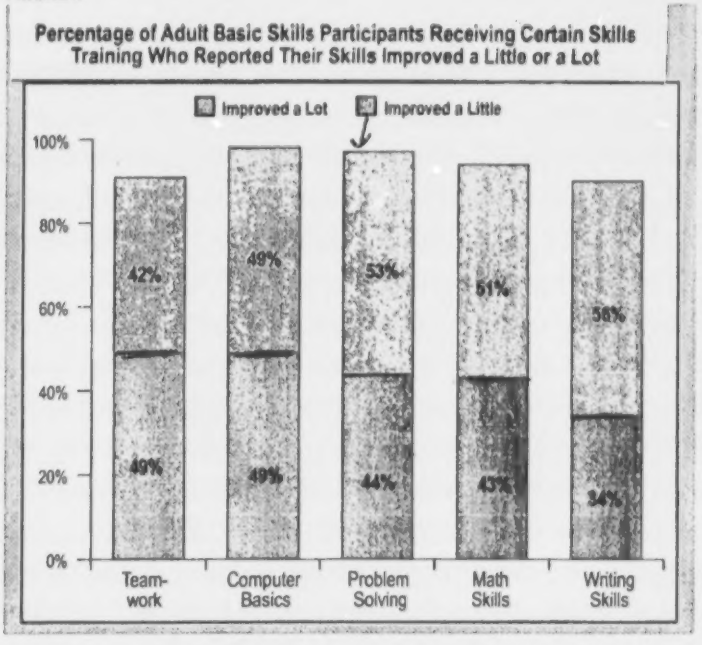


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FIGURE 4

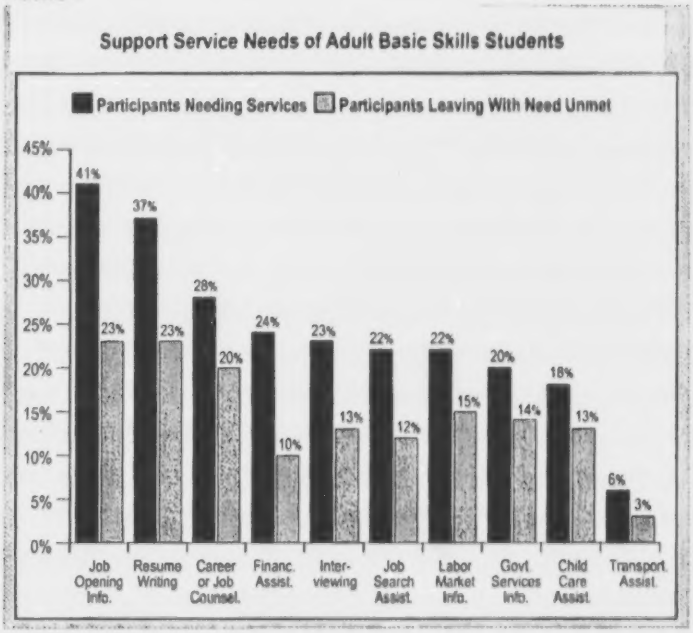
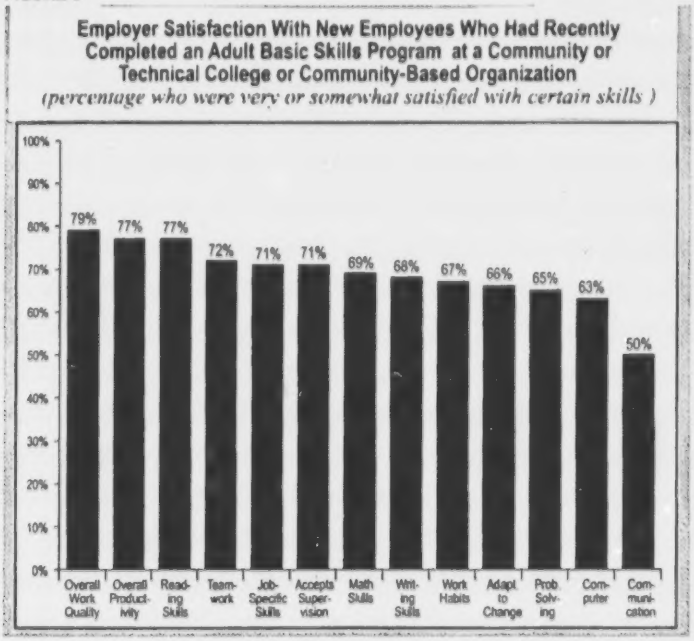


FIGURE 5



(See Figure 4.) According to survey responses, over half of those requiring these services did not have their needs met.

The need for services varied by gender. Female students were more likely to report a need for financial assistance (27 to 19 percent, respectively) and child care (21 to 14 percent, respectively) than their male counterparts.

Employer Satisfaction

The employer survey asked firms to evaluate new employees who had recently completed an Adult Basic Skills Education program at a community or technical college or a community-based organization. Of those firms, 79 percent stated they were satisfied with the overall quality of work of these new employees, as opposed to 70 percent two years ago. And, 77 percent of employers said they were either somewhat or very satisfied with workers' overall productivity. (See Figure 5.) Employers reported relatively high levels of satisfaction with these new workers' reading skills. Satisfaction with math and writing skills was lower, and half of the employers were not satisfied with these workers' communication skills.

Employment and Earnings

According to the survey responses, 82 percent of the 1997-98 basic skills students were employed during the period 6 to 9 months after leaving their program. (See Figure 6.) According to ESD record matches, 62 percent of basic skills students had reported employment during the third

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quarter after they left the program.[5] This is a substantial increase over the 49 percent reported 2 years ago. Wages also increased. Based on record matches, the median wage for these students 6 to 9 months after they left the program was $8.47 per hour.

To examine wage distribution of former students, we determined where they fall in terms of the wage distribution for all Washington workers. ESD defined thresholds that divide Washington's workers into quintiles based on their hourly wages.[6]

[5] Employment data were obtained through matches with ESD wage files from Washington, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match.

[6] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of FTEs, rather than in terms numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. ESD determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles.

FIGURE 6

Employment and Earnings of Adult Basic Skills Students in the Third Quarter After Leaving Program

	1995-96	1997-98
Percentage self-reporting employment when surveyed	59%	75%
Percentage self-reporting employment during the third quarter after leaving program	59%	82%
Percentage with employment reported by employers to employment security the third quarter after leaving program[7]	49%	62%
Median quarterly hours worked, of those working	419	452
Mean quarterly hours worked, of those working	380	410
Percentage employed full-time of those working (averaging 30 or more hours/week)	54%	57%
Median annualized earnings of those working[8]	$12,356	$15,056
Size of household which median earnings would support at poverty level[9]	2.5	3.4
Size of household which median earnings would support at twice poverty level	0.7	0.9
Median hourly wage of those working	$7.68	$8.47
Percentage self-reporting receipt of medical benefits from employer	52%	63%
Percentage self-reporting receipt of pension benefits from employer	37%	35%

[7] Employment data were obtained from matches with ESD wage files from Washington State, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also used.

[8] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars. Note that restricting the analysis only to those who are working and not enrolled in school does not substantially change the earnings or wage rates for former participants.

[9] The federal poverty guidelines as identified by the Department of Health and Human Services. The 1999 guidelines are used.

The percentage of participants who had hourly wages in the third quarter post-program in each quintile is shown below.

Lowest 20% of workers	45%
Second 20% of workers	36%
Middle 20% of workers	12%
Fourth 20% of workers	5%
Highest 20% of workers	2%

The third quarter after they left their basic skills program, the typical (median) participant had sufficient earnings to support a household of 3.4 persons above the poverty level. Using a higher income standard, the typical participant earned enough to support about one person at a "family wage" of twice the poverty level.

According to survey responses, 63 percent of those employed 9 months after their training had health benefits provided by their employer, and 35 percent had pension benefits. And, 18 percent reported employment covered by a union. One-fifth of the former basic skills students reported receiving some form of public assistance during the last 12 months (either TANF or Food Stamps). Two years ago, one-third reported receiving public assistance.

Areas for Improvement

The evaluation considered adult basic skills students at community and technical colleges who enrolled for a work-related reason and did not also participate in vocational training. Students in Adult Basic Skills instruction tended to be less educated and poorer than other community and technical college students. Consideration of the results should take into account these programmatic and demographic limitations.

Employment rates, hours worked, wages and earnings were higher in this evaluation compared to the results reported two years ago.

Overall, the survey responses suggest most students were satisfied with the program, but a substantial minority (38 percent) of students were only somewhat satisfied, and over half said their basic skills improved a little rather than a lot. Also, more students said the program partially met their objectives than said it definitely met their objectives. Employers who hired recent completers of Adult Basic Skills Education programs tended to agree that many could use further improvement in their skills, especially their communication skills. Perhaps the length of training, which is short for many participants, should be increased.

In addition to greater improvement in basic skills, more could be done to integrate work skills in adult basic skills instruction. Only 40 percent or fewer of the students reported receiving training in problem solving, computer skills, teamwork, or good work habits.

Student survey responses also show a need for wider access to support services. For many support services, the majority of those having needs said they were not met.

Job Training Partnership Act Title II-A for Adults[1]

The Job Training Partnership Act Title II-A program served economically disadvantaged adults, aged 22 and older, who experienced significant barriers to school or employment. Though the program targeted low-income adults, up to 10 percent of Title II-A participants could exceed the low-income criteria if they had other barriers, including low levels of literacy, dropping out of high school, a criminal record, or receipt of public assistance. When considering the outcomes of JTPA Title II-A participants it is important to remember that the program targeted low-income populations.

JTPA Title II-A offered participants a variety of training and employment-related services. Participants may have been given specific occupational training, basic skills instruction, and job search assistance such as career counseling, resume preparation, and job referrals. Occupational training occurred either at a training institution such as a community or technical college or a private vocational school, or at a worksite itself. JTPA services were often part of a "package" of employment and other services that assisted an individual and that drew on multiple funding sources. The programs were often of relatively short duration; the median length of participant enrollment was five months.

The Employment Security Department (ESD) administered the program at the state level. It was administered by 12 service delivery areas at the local level. A private industry council, who either provided services directly or purchased services from other providers in partnership with local elected officials, headed each service delivery area.

For this study, participant records were obtained on 2,831 adults who left the program during the 1997 program year (July 1, 1997, to June 30, 1998). Employment-related information was then obtained through a match with the unemployment insurance wage files for those participants with employment reported to the employment security departments of Washington and neighboring states.[2] In addition, 646 former participants responded to an in-depth telephone survey conducted during the fall of 1999. Participants who received JTPA Title II-A assessment services but did not participate in other program activities were not included in the findings.

[1] This report is based on JTPA programs in place during the time period July 1, 1997, to June 30, 1998. On July 1, 2000, the Workforce Investment Act replaced JTPA.

[2] ESD wage files contain information on 85 to 90 percent of employment in the state. Wage records were also obtained from Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match.

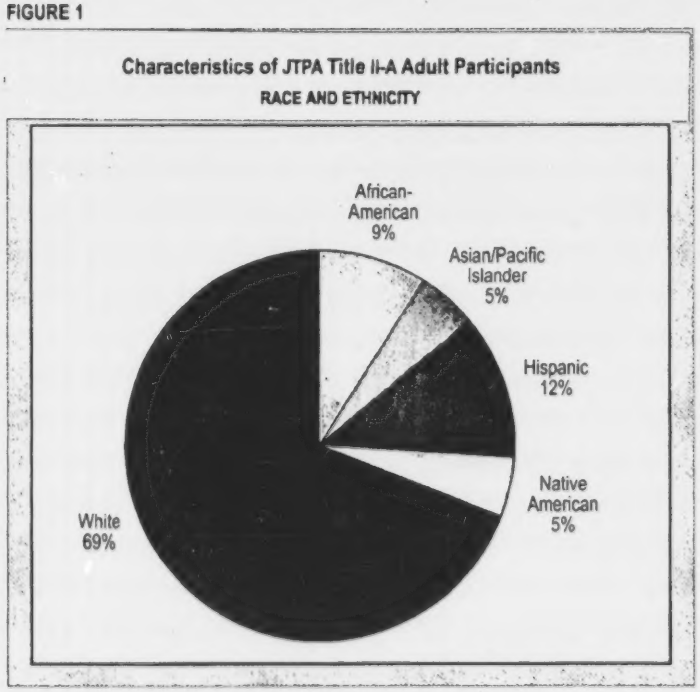
Participant Characteristics

Participants in JTPA Title II-A were more likely to be economically disadvantaged, a member of a racial or ethnic minority group, female, and have less education than the state general population. The state's poverty population differs from the overall population in the same ways.

Whereas 9 percent of Washington adults 18 years of age or older do not have a high school degree or GED, considerably more JTPA Title II-A participants (20 percent) had not completed grade 12 when they entered the program.[3] Thirty-one percent of the participants studied were people of color (compared to seventeen percent of the state population). Nine percent were African-American, twelve percent were Hispanic, and five percent were Asian/Pacific Islander. (See Figure 1.) Seventy percent of the participants were women. The median age of participants was 34. Thirty-five percent were in their twenties, and thirty-six percent in their thirties.

Only 36 percent of JTPA Title II-A participants had employment reported in ESD wage files during the third quarter before enrolling in JTPA. Among those who were employed, the hourly median wage prior to program enrollment was $7.28. This reflects the low income and barriers to employment Title II-A participants experience.

FIGURE 1



Competency Gains

Based on survey results, 84 percent of JTPA Title II-A participants entered the program in order to become more marketable and get a new job. Over half of the participants (58 percent) said that one of their purposes was to gain confidence in basic skills such as math and reading.

[3] 1998 Washington State Population Survey.

More than half of the participants reported they received occupational or workplace training such as skill training for a specific job, computer training, team work, and work habits. However, as was the case 2 years earlier, fewer than half of the participants indicated they had received instruction in basic skills, 39 percent received math instruction, 24 percent received reading instruction, and 38 percent received training in writing. (See Figure 2.)

Overall, the results suggest that JTPA Title II-A participants who received training generally felt it improved their skills. (See Figure 3.) Forty-three to seventy-eight percent of participants who received training in a certain skill area reported that the skill improved a lot.

Among those employed 9 months after leaving training, 70 percent said their training was related to that job; 75 percent said so 2 years ago. A substantial percentage of JTPA Title II-A participants continue their education following the training. Based on computer matches, almost 8 percent were found to be enrolled in a community or technical college program during the third quarter after leaving JTPA Title II-A training.

Participant Satisfaction

Survey results indicate that participants were mostly satisfied with the JTPA Title II-A program. Fifty-seven percent said the program definitely met their educational objectives compared to only thirteen percent who said their objectives were

FIGURE 2

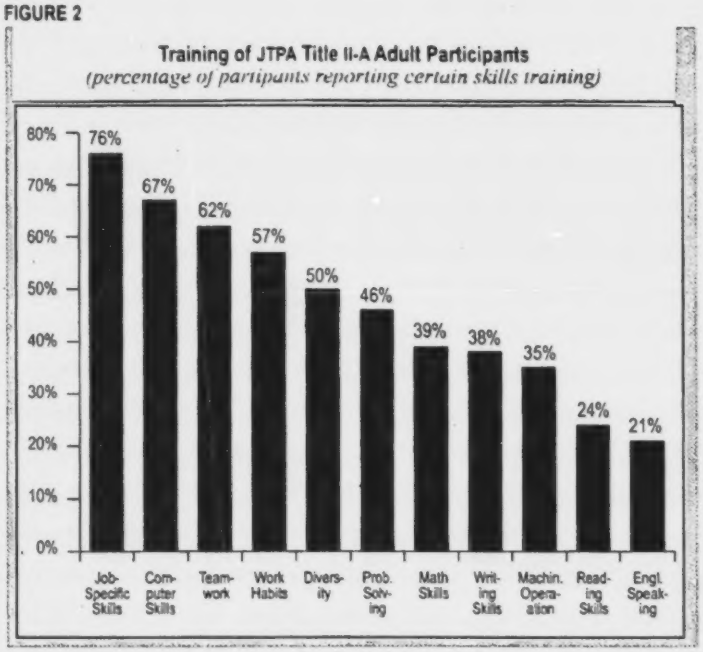


FIGURE 3

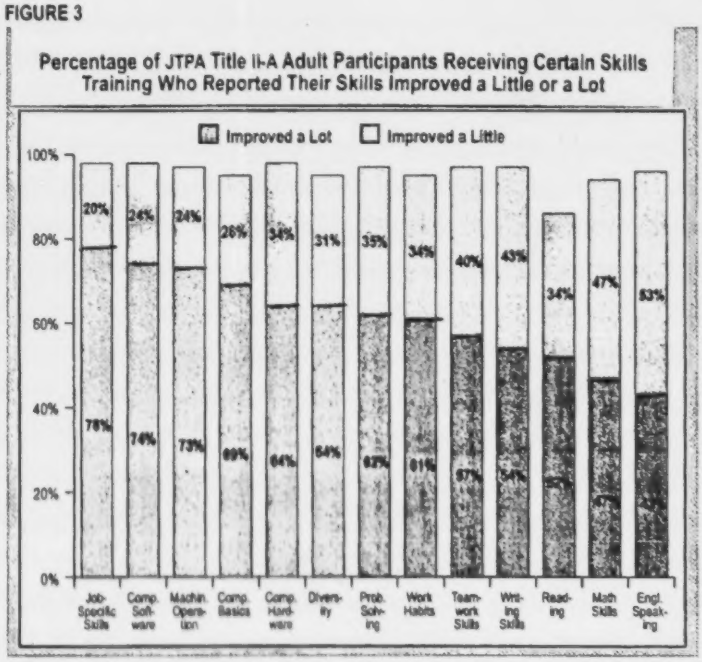


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FIGURE 4

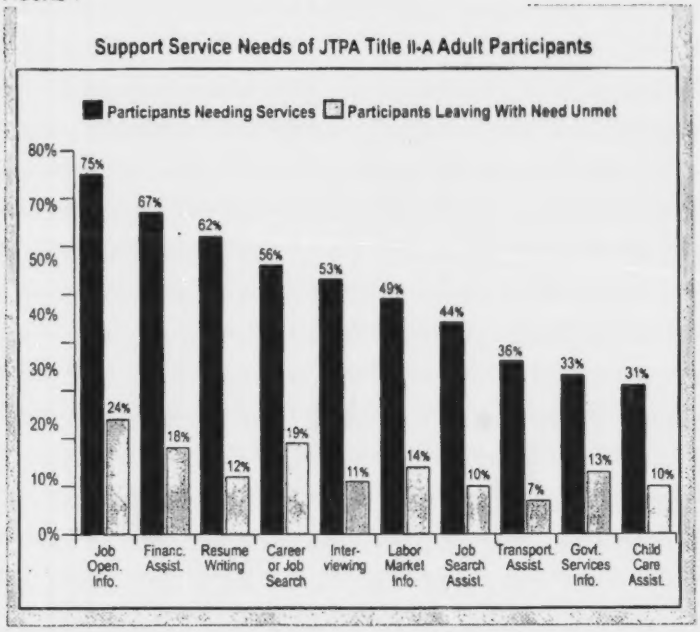
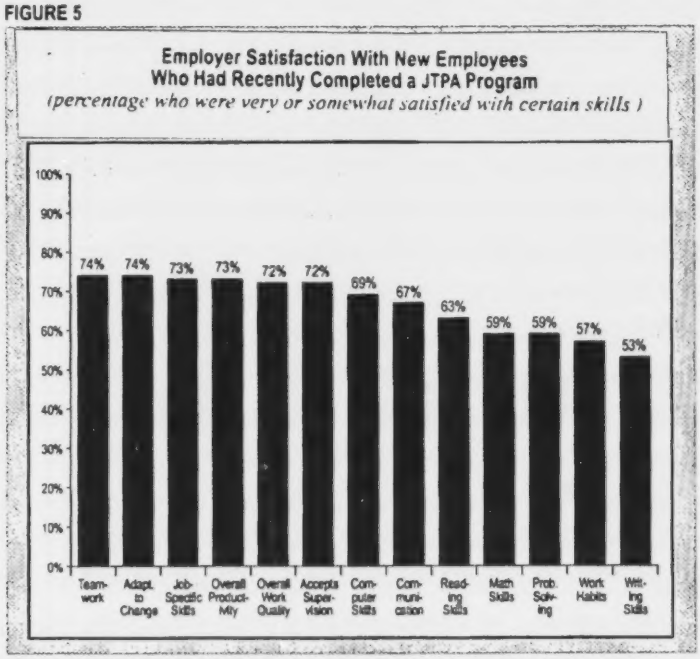


FIGURE 5



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not met at all. Eighty-nine percent of participants reported they were satisfied with the overall quality of the program; sixty-one percent were very satisfied and twenty-eight percent somewhat satisfied. Ninety-five percent were satisfied with the training facilities and eighty-nine percent with the quality of the teaching. Eighty-three percent said their training was useful to their career.

As stated above, JTPA Title II-A offered participants a variety of employment-related services in addition to basic skills and occupational training. Based on survey results, most of the participants who needed employment and support services received assistance in these areas. Participants most frequently reported needing assistance with information on job openings, financial assistance, resume writing, and career or job counseling. (See Figure 4.) Most of those needing these services received them. The largest unmet need (24 percent) was for information about job openings. Women expressed a significantly greater need for child care assistance than did men (39 percent to 9 percent, respectively).

Employer Satisfaction

It was not feasible to survey employers about each of the four JTPA programs included in the study (JTPA Titles II-A, II-B, II-C, and III) separately. Employers were instead asked about workers who had been trained "by JTPA." This section presents findings on employer

satisfaction with new employees who completed any type of JTPA program. Also, relatively few employers felt they were in a position to evaluate new employees who had recently completed a JTPA program. For these reasons, the findings on employer satisfaction should be treated with caution.

The employer survey asked firms to evaluate new employees who had recently completed a JTPA program. Overall, the results indicate that the majority of employers were satisfied with the quality and productivity of these workers. Seventy-two percent of employers said they were either somewhat or very satisfied with the overall quality of work of these new employees.[4] Seventy-three percent said they were satisfied with workers' overall productivity. (See Figure 5.)

Most employers were satisfied with these new workers' teamwork skills, adaptability to change, and job-specific skills. They were less likely to report satisfaction with math skills, problem-solving abilities, work habits, and writing skills.

Employment and Earnings

Seventy-nine percent of the 1997-98 JTPA Title II-A participants reported being employed during the period six to nine months after the program. (See Figure 6.)

FIGURE 6

Employment and Earnings of JTPA Title II-A Participants in the Third Quarter After Leaving Program

	1995-96	1997-98
Percentage self-reporting employment when surveyed	74%	70%
Percentage self-reporting employment during the third quarter after leaving program	81%	79%
Percentage with employment reported by employers to ESD the third quarter after leaving program	61%	71%
Median quarterly hours worked, of those working	397	429
Mean quarterly hours worked, of those working	354	383
Percentage employed full-time of those working (averaging 30 or more hours/week)	51%	54%
Median annualized earnings of those working[5]	$11,980	$14,568
Size of household which median earnings would support at poverty level[6]	2.3	3.2
Size of household which median earnings would support at twice poverty level	0.7	0.9
Median hourly wage of those working	$7.84	$8.78
Percentage self-reporting receipt of medical benefits from employer	51%	53%
Percentage self-reporting receipt of pension benefits from employer	23%	29%

[4] This is an improvement over the 1997 survey results. In 1997, 66 percent of employers said they were satisfied with the overall quality of work of such employees.

[5] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars. Note that restricting the analysis only to those who are working and not enrolled in school does not substantially change the median earnings or wage rates of former participants.

[6] The federal poverty guidelines are as identified by the Department of Health and Human Services. The 1999 guidelines are used.

Seventy-one percent had employment reported in ESD wage files during the third quarter after leaving the program.[7] This is a 10 percentage point increase over the covered employment rate found for 1995-96 participants. Inflation adjusted wages and earnings also increased. The median wage for JTPA Title II-A participants the third quarter after leaving the program was $8.78 per hour. The typical (median) participant had sufficient earnings to support a household of 3.2 persons above the poverty level.

In order to examine the wage distribution of former students, we determined where they fall in terms of the wage distribution for all Washington workers. ESD has defined thresholds that divide Washington's workers into quintiles based on their hourly wages.[8] The percentage of participants who had hourly wages in the third quarter post-program ineach quintile is shown below.

Lowest 20% of workers	41%
Second 20% of workers	41%
Middle 20% of workers	15%
Fourth 20% of workers	3%
Highest 20% of workers	0%

According to the survey responses, 53 percent of those employed had health benefits provided by their employer, and 29 percent received pension benefits. Eight percent reported employment covered by a union.

Employment rates were similar for men and women and for each of the race-ethnicity groups, except for Native Americans, whose reported employment rate was eight percentage points less than that of Whites.

Earnings varied by gender and race-ethnicity. Among former participants employed during the third quarter after leaving the program, women earned only 82 percent as much as men. They tended to have both lower hourly wages and fewer hours worked than their male counterparts. However, there were even larger gender differences in earnings among the participants before they entered the program. Among the race-ethnicity groups, Native Americans had the lowest earnings (with median

[7] Employment data were obtained from matches with ESD wage files from Washington State, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match.

[8] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of FTEs, rather than in terms numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. ESD determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they would count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles.

earnings 10 percent lower than Whites), because of both fewer hours worked and lower wage rates. African-Americans earned 6 percent less than Whites on average (median), due entirely to fewer hours worked. Whereas Hispanics tended to have the lowest hourly wages, their median earnings were 5 percent higher than Whites, because they worked more hours. Asian/Pacific Islanders had the highest wages and worked the most hours of any group, producing earnings 22 percent higher than those for White participants.

Areas for Improvement

JTPA Title II-A served adults who are disadvantaged, and on the average, enrollment lasted about five months. The relatively low earnings of former participants nine months after they left the program should be understood in this context. Most participants were very satisfied with the services they received, though one service with substantial unmet need is information on job openings. Reported employment levels and inflation-adjusted earnings increased substantially over the results reported two years ago.

Survey results suggest that the 1997-98 and the 1995-96 program participants had comparable levels of access to various types of training. The 1997-98 participants were more likely to report that their job-specific and computer skills improved a lot. Moreover, relatively high proportions reported receiving required support services.

There are, however, some areas where more should be done. Given the low educational attainment of participants prior to entering the program, it appears likely that higher percentages of participants should have received basic skills instruction in reading, writing, and math. Relatively few participants reported receiving these types of training. As noted in prior evaluations, basic skills instruction is most effective when integrated with work and job skills training.

There remains a need to improve the postprogram earnings of participants, particularly for women and Native Americans. While labor market outcomes reflect the disadvantaged status of participants when they entered the program and the available job market, the program should have done more to target occupations and industries that pay a higher wage and more frequently provide full-time work. Among those working in the third quarter after leaving the program, only about one half were employed full-time.

Secondary Vocational-Technical Education

Secondary vocational-technical education serves high school age youth in 237 school districts and 9 regional vocational skills centers throughout the state. Students choose from among vocational programs in agriculture, business, marketing, family and consumer sciences, technology, trade and industry, and health occupations. Vocational guidance and counseling supports the offerings in most districts. Approximately 85 percent of high school students take at least one vocational education class. All students are required to complete one occupational credit in order to graduate, and most students satisfy the requirement by participating in an approved vocational education class.[1]

We limited our evaluation of this program to the segment of students who are identified by their districts as vocational education completers (districts define a vocational completer as someone who completed a vocational sequence, whether or not the student earns a diploma). This strategy is different than the other program evaluations included in the study, which were not limited to completers only.[2]

The Office of Superintendent of Public Instruction (OSPI) has just begun to maintain central unit records on K-12 students. Therefore, it was necessary to ask individual school districts to volunteer records of those students who had completed a vocational education sequence. The results reported here represent data from 109 school districts (47 percent of the total) and 3 skills centers. The districts include a variety of urban, suburban, and rural areas around the state. However, the sample is not random. Moreover, the sample of participating districts and vocational skills centers is not the same as in our earlier studies.

For this study, we obtained information on 6,041 students who completed secondary vocational-technical education during the 1997-98 school year. Demographic and course data were obtained from student records in various school districts, and employment-related information was secured from a match with the Employment Security Department (ESD) records. Enrollment data from all Washington community and

[1] Note that the requirement can, at the discretion of a principal, also be satisfied by band, art, chorus, and other classes.

[2] Secondary vocational education counts any student who takes a single vocational education course as a vocational participant. This definition does not identify a group of participants that is separate from all other graduating students. The state defines a student who completes 360 hours of sequenced vocational classes as a vocational completer. The designation of who is a vocational completer, however, does vary across some school districts. Smaller schools with fewer resources, for example, will offer the most complete sequence they can, but it may be fewer than 360 hours. These schools may still consider the students who finish the sequence to be completers.

technical colleges and public four-year institutions, as well as from several private colleges, were analyzed to examine the extent to which vocational students continued their education. In addition, 559 former students completed a telephone survey during the fall of 1999.

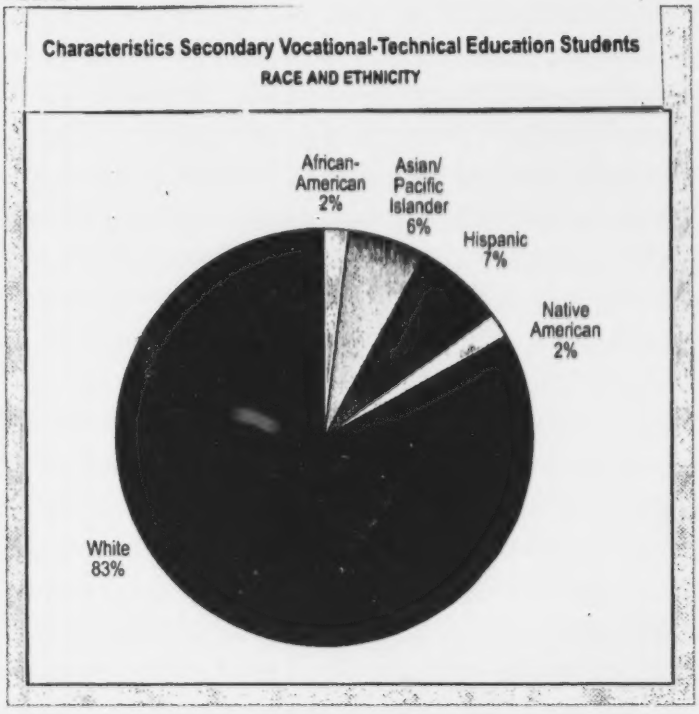
Participant Characteristics

The students included in the study reflect roughly the racial-ethnic and gender makeup of the state's public schools, though White students are over represented and African-American students under represented in the high school vocational programs we studied. Of the students in the study, 83 percent were White, compared to 76 percent of public school students. (See Figure 1.) Half of the students studied were female.

Competency Gains

According to the survey, 93 percent of students enrolled in secondary vocational-technical education for personal enjoyment or improvement and 85 percent to make school more interesting. Students also said they enrolled to gain skills for a new job (63 percent), to prepare for postsecondary vocational education (70 percent), and to increase confidence in basic skills (63 percent).

FIGURE 1



The majority of students reported they received training in team work skills, specific job skills, computers, problem solving, and work habits as part of their vocational classes. Between 43 and 50 percent reported receiving instruction in math, writing, and using specific equipment and machinery. (See Figure 2.) The proportion of students reporting they received job-specific skills training (71 percent) was substantially lower than was reported in our 1997 survey (83 percent).

Boys were much more likely than girls to receive training in machinery operation (63 to 34 percent, respectively), job-specific skills (80 to 61 percent), and math skills (51 to 34 percent).

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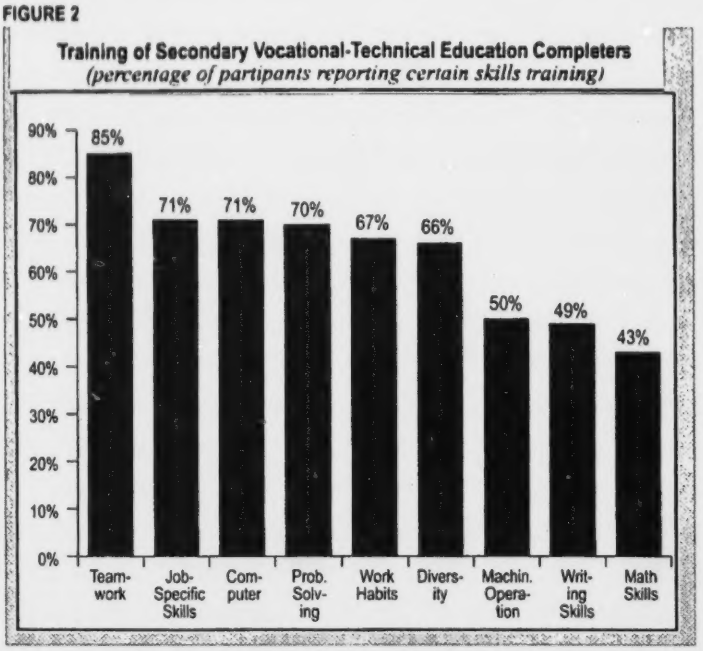
In most categories, the majority of participants reported that their vocational training improved their skills a lot. (See Figure 3.) The three exceptions were work habits, math, and writing skills. Among students who were employed when surveyed, 58 percent said their high school vocational training was related to their job; down from 70 percent 2 years ago.

Many of the former students continued their education at a community or technical college or four-year university. In the third quarter after completing their program, 26 percent of the former students were enrolled at a community or technical college, and 10 percent were enrolled in a 4-year institution.

FIGURE 2



Participant Satisfaction

According to the survey, former students were generally satisfied with their high school vocational program. Fifty-five percent said the program definitely met their objectives, while only four percent said their objectives were not met at all. Ninety-five percent of former students reported that they were satisfied with the overall program, and not more than fourteen percent of the former students were dissatisfied with any aspect of their instruction. These levels of satisfaction are similar to those reported two years earlier.

In general, former high school vocational students reported needing fewer support services than other groups we studied, and when they did need these services

FIGURE 3

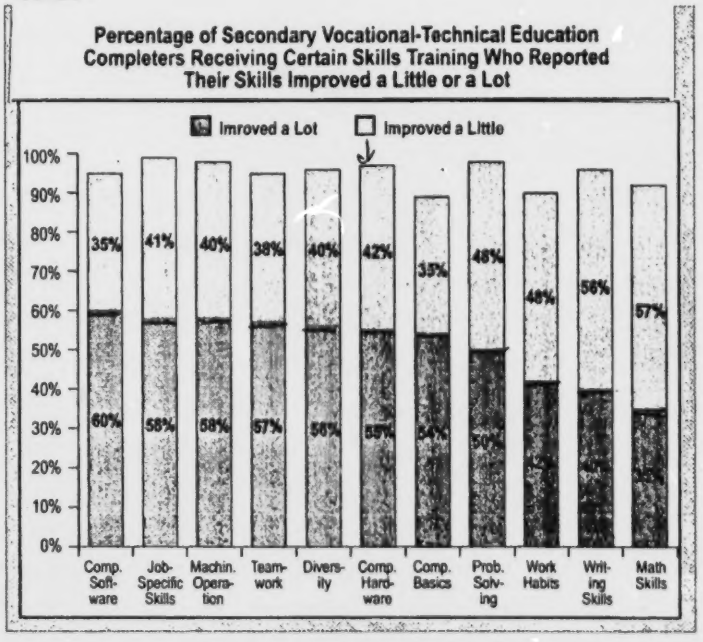


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FIGURE 4

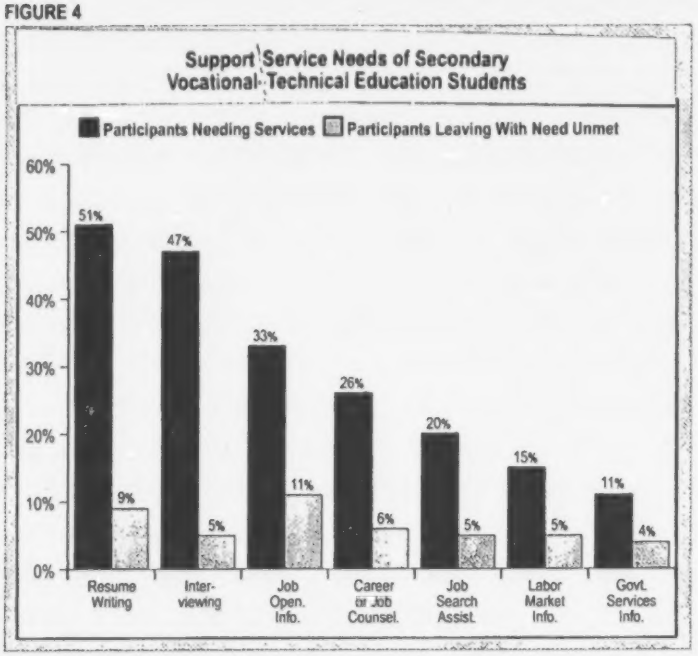
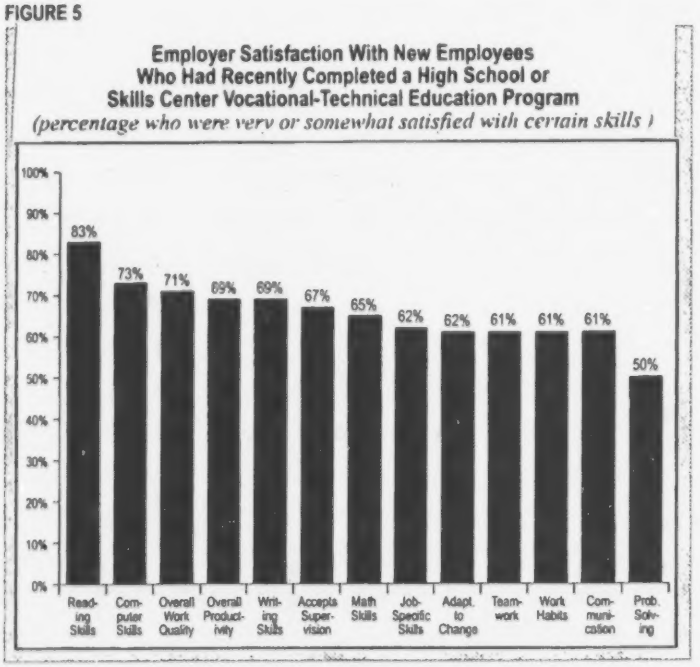


FIGURE 5



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they generally received them. (See Figure 4.) The services most frequently needed by students were assistance with resume writing and job interviewing.

Employer Satisfaction

The employer survey asked firms to evaluate new employees who recently completed a high school vocational program. Seventy-one percent of employers said they were either very or somewhat satisfied with the overall quality of work of these new employees. This is an increase over the 58 percent reported in our 1997 survey. However, satisfaction with workers' overall productivity declined. Sixty-nine percent were satisfied with overall productivity, as opposed to eighty-seven percent two years earlier. (See Figure 5.)

Most employers were satisfied with the basic skills (reading, writing, and math) and computer skills of their new workers. More than a third, however, were not satisfied with their job-specific skills, team work skills, work habits, and communication skills. One half of the employers were not satisfied with the problem-solving ability of these workers.

Employment and Earnings

According to the survey, 79 percent of the 1997-98 secondary vocational completers were employed during the period 6 to 9 months after leaving school. Based on ESD wage records, we found that 62 percent of the secondary vocational education participants had reported

employment during the third quarter after they left their program.[3] The median wage for former high school vocational completers was $7.20 per hour. Though this wage may seem low, it is important to remember these are young, entry-level workers. Moreover, many were working while attending college. Among those who were not enrolled in postsecondary education, the median wage was $7.41. (See Figure 6.)

FIGURE 6

Employment and Earnings of Secondary Vocational-Technical Students in the Third Quarter After Leaving Program

	1995-96 COMPLETERS	1997-98 COMPLETERS	1997-98 COMPLETERS NOT ENROLLED IN SCHOOL
Percentage self-reporting employment when surveyed	74%	75%	
Percentage self-reporting employment during the third quarter after leaving program	80%	79%	
Percentage with employment reported by employers to ESD the third quarter after leaving program	68%	62%	
Median quarterly hours worked, of those working	289	274	328
Mean quarterly hours worked, of those working	284	278	307
Percentage employed full-time of those working (averaging 30 or more hours/week)	33%	29%	37%
Median annualized earnings of those working[4]	$7,412	$7,948	$9,468
Size of household which median earnings would support at poverty level[5]	0.9	1.0	1.4
Size of household which median earnings would support at twice poverty level	0.4	0.5	0.6
Median hourly wage of those working	$6.63	$7.20	$7.41
Percentage self-reporting receipt of medical benefits from employer	34%	35%	
Percentage self-reporting receipt of pension benefits from employer	17%	17%	

[3] Wage files from Washington, Idaho, Montana, Alaska, and Oregon were used. Military employment records were also included in the match. Washington's ESD wage file includes 85 to 90 percent of the employment in the state. Note that ESD wage files do not include information on self-employment. This is one reason why employment reported by ESD is lower than what is self-reported by the survey respondents.

[4] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars.

[5] The federal poverty guidelines are as identified by the Department of Health and Human Services. The 1999 guidelines are used.

In all, 74 percent were either employed in employment reported to ESD or enrolled in a 2- or 4-year college during the third quarter following their program. Over two-thirds of those enrolled in college also had covered employment in that quarter (77 percent of those in community colleges and 44 percent of those enrolled in 4-year colleges). Extending our analysis to the entire year after students left their program, 89 percent of the former students were found to have some reported employment during the year or were enrolled in a 2- or 4-year college.[6] These figures are somewhat lower than reported for seniors who left high school in 1996. It is not clear, though, whether this reflects a change in outcomes or differences between the schools that participated in the two rounds of data collection.

The third quarter after they left their high school vocational program, the typical (median) student had sufficient earnings to support one person above the poverty level. Among those who were working and not enrolled in postsecondary education, median earnings could support 1.4 persons above the poverty line.

According to the survey responses, 35 percent of those employed had health benefits provided by their employer, and 17 percent received pension benefits. Only 4 percent reported receiving AFDC or Food Stamps in the last 12 months.

Wages and earnings varied by gender and race-ethnicity. As is true in most other programs we studied, male students had higher quarterly earnings than female students. Among those working during the third quarter after leaving school, men earned 25 percent more than women; they worked more hours and received higher hourly wages. This gender difference is particularly troubling because, unlike other programs included in this report, the outcome is largely unexplained by differences in employment prior to the start of the program.

Hispanic students had the lowest reported median wage rate, and despite working more hours, they earned 6 percent less than White students. Median earnings for Asian/Pacific students were 7 percent less than that for Whites; they had a relatively high median wage rate but reported fewer hours worked. African-American students, on average, earned as much as Whites. Native Americans had the highest median earnings, but this was due to long average hours worked rather than high wage rates.

In order to examine the wage distribution of former students, we determined where they fall in terms of the wage distribution for all Washington workers. ESD has defined thresholds that divide Washington's workers into quintiles

[6] All Washington public colleges and several private colleges enrollments were analyzed, as well as some colleges in other states.

based on their hourly wages.[7] The percentage of participants who had hourly wages in the third quarter post-program in each quintile is shown below.

Lowest 20% of workers	67%
Second 20% of workers	26%
Middle 20% of workers	4%
Fourth 20% of workers	2%
Highest 20% of workers	1%

Areas for Improvement

The majority of students were satisfied with the overall quality of their secondary vocational education program. Most were either employed or enrolled in a two- or four-year college during the third quarter after leaving their program. Moreover, satisfaction with support services appears to be high. The majority who needed a service received it.

Whereas the evaluation results are generally positive, there are areas that could be stronger. Student surveys suggest that more resources should be devoted toward training in basic skills. Relatively few students reported receiving training in writing and math skills, and among those that did, the majority said their skills improved only a little.

There is also room for improvement in job-specific and workplace skills. The percentage of students who received job-specific training and the percentage who reported that training was related to employment declined from our last evaluation. In terms of workplace skills, employers tended to be least satisfied with team work skills, work habits, and, communication and problem-solving skills.

As was found in the previous evaluation, the postprogram wage rates of female students were lower than those for males. Secondary vocational education should continue to strive to eradicate differences based upon gender.

Although more districts volunteered to participate in this year's program of student follow-ups, this is still no substitute for an ongoing evaluation program at OSPI to learn post-school results and to maintain student data in a consistent manner. OSPI is now moving to build this capacity.

[7] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of FTEs, rather than in terms numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. ESD determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they would count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles.

Job Training Partnership Act Title II-C for Youth[1]

The Job Training Partnership Act Title II-C program served low-income youth from 16 to 21 years of age with barriers to success in school or employment. Barriers included low levels of literacy, dropping out of school, a criminal record, and receipt of AFDC. When considering participant outcomes of Title II-C, it is important to remember the program targeted low-income youth specifically, and those participants do not have ready access to many resources and opportunities.

JTPA Title II-C provided a variety of training and employment-related services, including, but not limited to, occupational training, basic skills instruction, work experience, and job search assistance, such as career counseling, resume preparation, and job referrals. Basic skills instruction includes reading, writing, speaking, math, and reasoning with the goal to demonstrate the ability to correctly apply these skills. Lacking these skills was a condition of eligibility for all in-school and most out-of-school youth. Participation in Title II-C was closely linked to educational goals, remaining in or returning to school, and obtaining basic educational skills.

Title II-C was administered by the Employment Security Department (ESD) at the state level and by 12 service delivery areas (SDAs) at the local level. Each SDA was headed by a private industry council who either provided services directly or purchased services from other providers in partnership with local elected officials. The SDAs developed a local education plan in cooperation with local school districts, which established educational standards for individual progress. The SDAs then monitored the participants' progress and could supplement traditional services by providing tutoring, mentoring, or other appropriate activities.

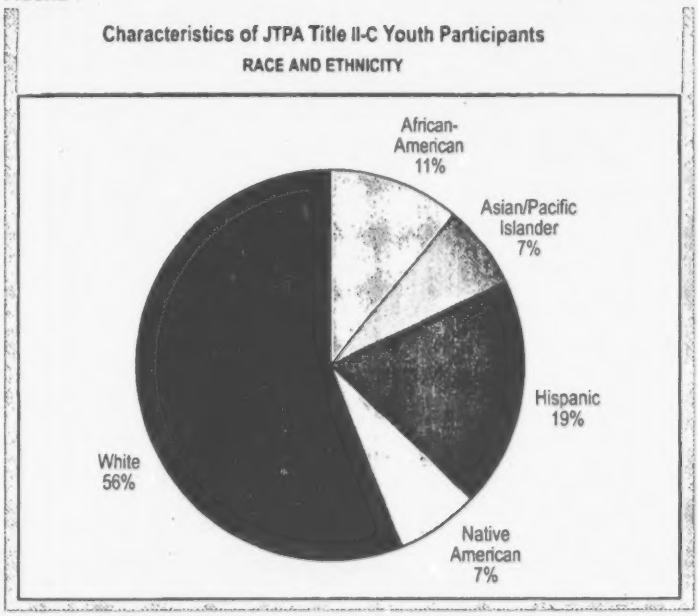
Significant numbers of individuals entered and left the JTPA Title II-C program without receiving any employment-related service beyond an employability assessment. This report excludes such individuals. Individuals whose participation was limited to assessment services constituted 12 percent of the JTPA Title II-C enrollees who exited during the program year. For the study, participant records were obtained on 1,868 youth who left the JTPA Title II-C program during the 1997 program year (July 1, 1997, to June 30, 1998). In addition, 297 former participants responded to the survey conducted during the fall of 1999. On the average, the participants were in the JTPA Title II-C program for about five months.

[1] This report is based on JTPA programs in place during the time period July 1, 1997, to June 30, 1998. On July 1, 2000, the Workforce Investment Act replaced JTPA.

Participant Characteristics

Title II-C participants were more racially-ethnically diverse, less educated, and poorer than the state general population. African-American, Hispanic, and Native American youth were all represented in the program at levels above their state populations (Asian/Pacific Islander youth participate at levels similar to their state population). Native American participation was particularly high at four times the proportion of Native Americans in Washington. (See Figure 1.) Female youth made up 60 percent of the total JTPA Title II-C population. Seventy percent of former participants were under age twenty at the time they exited the program; twenty-four percent were under age eighteen. Only 6 percent were over age 21.

FIGURE 1



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Given their age, Title II-C participants had little prior employment. Only 24 percent had reported employment in the third quarter prior to enrollment. Those employed had median quarterly earnings of $727, reflecting both low wage rates ($5.44/hour, median) and part-time employment (141 hours, median).[2]

Competency Gains

Based on survey results, the majority of JTPA Title II-C participants entered the program to improve their job skills, get help in finding a job, and to get hands-on job training. Seventy-five percent stated they enrolled to get skills for a new job, seventy-four percent to obtain job search assistance, and seventy-six percent to get on-the-job-training.

When surveyed, 68 percent of participants reported they received training in specific job skills as part of their program; a substantial decline from the 81 percent reported 2 years ago. The majority of participants said they received training in teamwork, work habits, and problem-solving skills. (See Figure 2.) Among those who received such training, 96 percent or more said their skills had improved in these areas. (See Figure 3.) Over half the participants reported that their skills in most categories had improved a lot; the exceptions being computer hardware, math, and writing

[2] All wages and earnings are in first quarter 1999 dollars.

skills. Only about one-third of participants received training in writing and math. Overall, female participants were much more likely than male participants to receive computer training (64 to 50 percent, respectively).

Among those employed after the program, only 55 percent said their training was related to their job; only 22 percent reported that it was very related. In the survey conducted two years earlier, 71 percent said training was related to their job.

Participant Satisfaction

Survey results reveal that participants were quite satisfied with the training and support services they received as part of their JTPA Title II-C program. Ninety-four percent of the participants surveyed said they had met their educational objectives in the program (fifty-two percent stated they "definitely" met their objectives). Overall satisfaction was comparable to levels reported two years ago. Ninety-six percent were satisfied with the overall quality of the program. Satisfaction levels were high for all aspects of training: facilities (94 percent satisfied), training equipment (90 percent), quality of teaching (89 percent), usefulness to career (87 percent), and length of program (86 percent).

As stated earlier, many of the services provided by JTPA Title II-C were not occupational or basic skills training, but employment-related services such as job search assistance. Based on the survey

FIGURE 2

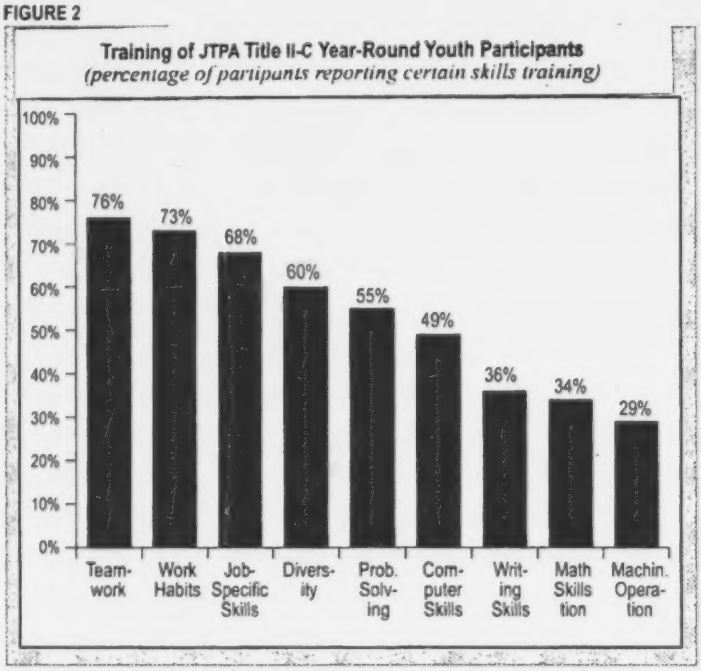
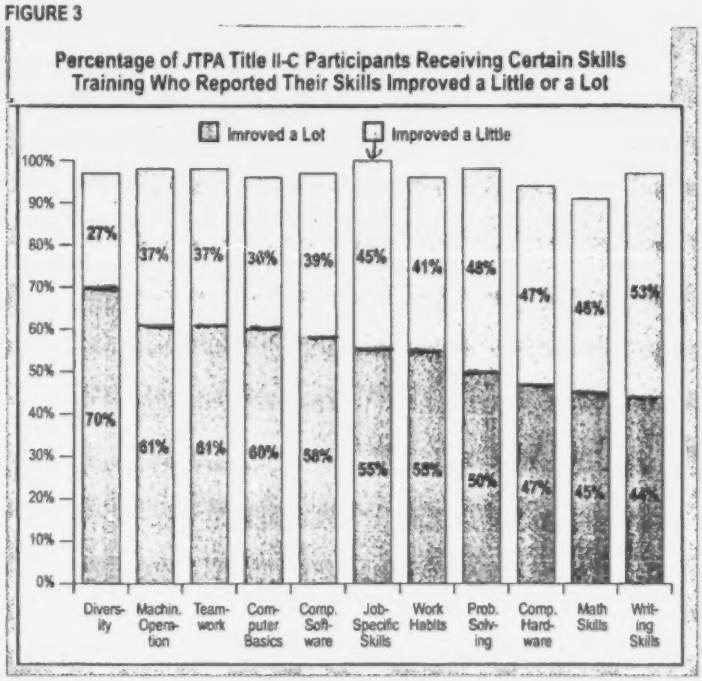


FIGURE 3



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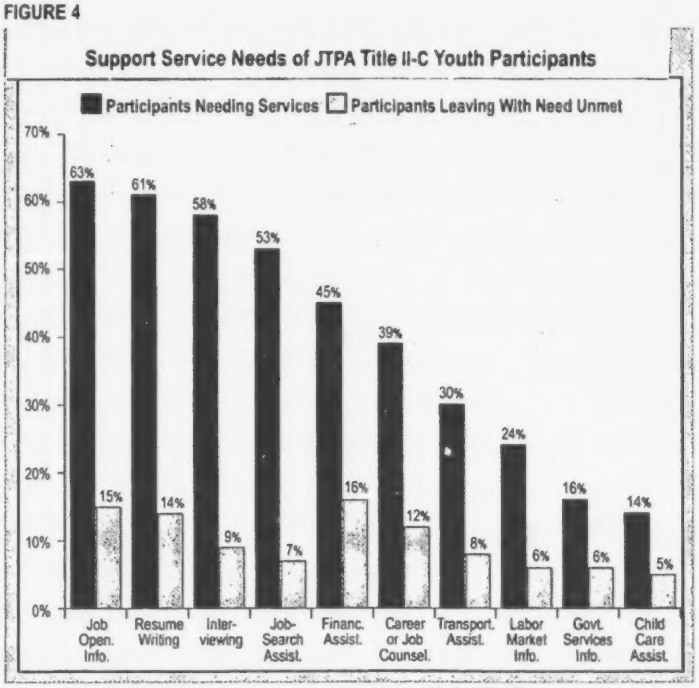
results, most of the participants who needed employment and other support services received them, and in most cases they said their needs had been met by the services.

The services most frequently needed by the participants were information on job openings, assistance with resume writing, interviewing, and job search assistance. In each case, most participants had their needs met. (See Figure 4.) In general, female participants were much more likely than their male counterparts to report needing child care assistance. Roughly one in every four female participants required it.

FIGURE 4



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Employer Satisfaction

It was not feasible to ask employers about each of the four JTPA programs included in the study (JTPA Titles II-A, II-B, II-C, and III) separately. Employers were instead asked about workers who had been trained "by JTPA." This section presents findings on employer satisfaction with new employees who completed any type of JTPA program. In addition, relatively few employers felt they were in a position to evaluate new employees who had recently completed a JTPA program. For these reasons, the findings on employer satisfaction should be treated with caution.

Seventy-two percent of employers said they were either somewhat or very satisfied with the overall quality of work of these new employees.[3] Seventy-three percent said they were satisfied with workers' overall productivity. For further elaboration of employers' reactions, please see employer satisfaction in the section on JTPA Title II-A for Disadvantaged Adults.

Employment and Earnings

According to survey responses, 76 percent of the 1997-98 JTPA Title II-C participants were employed during the period 6 to 9 months following the program. (See Figure 5.)

[3] This is an improvement over the 1997 survey results. In 1997, 66 percent of employers said they were satisfied with the overall quality of work of such employees.

Fifty-nine percent of the JTPA Title II-C participants had employment reported to ESD during the third quarter after they left the program.[6] This is a substantial increase over the 50 percent reported 2 years ago. However, only 27 percent worked an average of 30 hours or more per week during the third quarter. The median wage was $6.48 per hour, and median annualized earnings were $6,388. Based on ESD data, three quarters of those employed worked for firms in the retail trade and service sectors of the economy. Though these earnings figures are low, it is important to remember that JTPA Title II-C participants are young, entry-level workers.

The third quarter after they left the JTPA Title II-C program, the typical (median) participant did not have sufficient earnings to support a household of one person above the poverty level.

In order to examine the wage distribution of former students, we determined where they fell in terms of the wage distribution for all Washington workers. ESD has defined thresholds that divide Washington's workers into quintiles based on their hourly wages.[7] The percentage of participants who had hourly wages in the third quarter post-program in each quintile is shown below.

Lowest 20% of workers	78%
Second 20% of workers	19%
Middle 20% of workers	2%
Fourth 20% of workers	1%
Highest 20% of workers	0%

FIGURE 5

Employment and Earnings of JTPA Title II-C Participants in the Third Quarter After Leaving Program

	1995-96	1997-98
Percentage self-reporting employment when surveyed	66%	62%
Percentage self-reporting employment during the third quarter after leaving program	66%	76%
Percentage with employment reported by employers to ESD the third quarter after leaving program	50%	59%
Median quarterly hours worked, of those working	258	250
Mean quarterly hours worked, of those working	271	267
Percentage employed full-time of those working (averaging 30 or more hours/week)	32%	27%
Median annualized earnings of those working[4]	$6,024	$6,388
Size of household which median earnings would support at poverty level[5]	0.7	0.8
Size of household which median earnings would support at twice poverty level	0.4	0.4
Median hourly wage of those working	$6.15	$6.48
Percentage self-reporting receipt of medical benefits from employer	36%	35%
Percentage self-reporting receipt of pension benefits from employer	20%	18%

[4] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars. Note that restricting the analysis only to those who are working and not enrolled in school does not substantially change the earnings or wage rates for former participants.

[5] The federal poverty guidelines are as identified by the Department of Health and Human Services. The 1999 guidelines were used.

[6] Employment data were obtained from matches with ESD wage files from Washington, Idaho, Montana, Alaska, and Oregon. Federal and military employment records were also included in the match. Washington's ESD wage file includes 85 to 90 percent of employment in the state.

[7] The upper thresholds, expressed in terms of first quarter 1999 dollars, are $8.63 for the lowest quintile, $12.38 for the second, $16.94 for the third, and $24.37 for the fourth. These thresholds summarize Washington's wage distribution in terms of FTEs, rather than in terms numbers of workers. For example, the correct interpretation of the first threshold is that 20 percent of FTEs are in jobs paying less than $8.63 per hour. ESD determines the FTE for each worker by dividing reported hours worked in a quarter by 520. If someone worked 260 hours, they would count as 0.5 FTE. We calculated the FTE for each former program participant accordingly. The reported percentages reflect the proportions of FTEs falling into the various quintiles.

Wage rates were generally low and did not vary much by race-ethnicity. However, there were substantial differences across groups in hours worked, and this did cause earnings to vary. African-Americans, Asian/Pacific Islanders, and Native Americans earned less than Whites, because they had fewer reported hours of work. Women actually earned a little more than men, because they worked more hours.

Earnings and work hours rise steadily with age. Only 54 percent of the youth who were under 18 years of age in mid-1998 were working 3 quarters after exit. Only nine percent were working full–time. The median hourly wage for this group was $5.99 per hour. Median quarterly earnings were $1,037. These younger youth typically worked only 160 hours per quarter. This is not necessarily a bad thing, as completion of a high school education is an important factor in future labor market success. Earnings and work hours were substantially higher for youth age 20 or more in mid-1998. Sixty-four percent of them worked in the third quarter after exit (thirty-five percent of them full-time). The median hourly wage for the older youth was $6.99 per hour. Median quarterly earnings were $2,235. Older youth worked almost twice as many hours as their younger counterparts (318 hours per quarter).

According to the survey responses, 35 percent of those employed had health benefits provided by their employer, and 18 percent received pension benefits. Five percent of the participants reported employment covered by a union.

Areas for Improvement

JTPA Title II-C served youth who were disadvantaged and provided services for only about five months on the average. As is typical of young entry-level workers, former participant wages and earnings were relatively low. Most participants, however, were very satisfied with the overall quality of their program, and support services remain a strong area for Title II-C.

The last outcomes evaluation, based on the 1995-96 participant survey, found that a substantial percentage of participants could have used more instruction than the program provided, especially in basic skills. The recent survey of 1997-98 participants found no increase in the percentage reportedly receiving basic skills instruction. Given that the large majority of participants entered the program without a GED or high school diploma, it seems that more than 36 percent of the participants should report receiving basic skills instruction. Moreover, among those who did receive it, fewer than half reported that their basic skills increased a lot. As noted in prior evaluations, basic skills instruction is most effective when integrated with work and job skills training.

Employment rates, based on ESD wage file data, increased since our last evaluation. Earnings and wages were also somewhat higher, but they remain low. The program should attempt to better target occupations and industries that pay higher wages.

Job Training Partnership Act Title II-B Summer Youth Program[1]

The Job Training Partnership Act Title II-B program served economically disadvantaged youth from 14 to 21 years of age. JTPA Title II-B offered both classroom and work-based learning opportunities: employment for approximately eight weeks in the summer months and education remediation, which usually included high school credit for course work accomplished. Of all JTPA Title II-B youth, 67 percent were required to be enrolled in educational activities. Youth may have been enrolled in school-sponsored summer school or work with certified teachers who directly provided educational activities.

JTPA Title II-B was administered in the same manner as the other JTPA titles with one important difference: the program was started and stopped each year because it operated only during the summer months. Because of severe cutbacks in funding the year-round program for youth, a number of participants transferred between JTPA Title II-C (year-round) and JTPA Title II-B (summer only) at the beginning and end of the summer. When considering the outcomes of these participants it is important to remember that the program was designed to improve school retention and completion, academic performance, and employability skills among youth.

The Employment Security Department (ESD) administered the program at the state level, and 12 service delivery areas administered it at the local level. Each service delivery area was headed by a private industry council, which either provided services directly or purchased services from other providers, in partnership with local elected officials.

For the study, participant records were obtained on 6,080 individuals who participated in the JTPA Title II-B program during the summer of 1997. Individuals who transferred to the JTPA Title II-C (year-round) youth program at the end of the summer were excluded from this analysis and included in the section on the JTPA Title II-C program. Employment-related information was obtained through matches with ESD wage files for Washington, Oregon, Idaho, Montana, and Alaska. In addition, 1,453 former participants responded to a telephone survey conducted in the fall of 1999.

Participant Characteristics

Participants in the JTPA Title II-B program were more likely to be young, poor, and persons of color than is the state general population. More than three-quarters of the participants were less than 20 years old. Roughly half of the participants were White, compared to the roughly three-quarters of public school students. Of the program participants, 17 percent were

[1] This report is based on JTPA programs in place during the time period July 1, 1997, to June 30, 1998. On July 1, 2000, the Workforce Investment Act replaced JTPA.

FIGURE 1

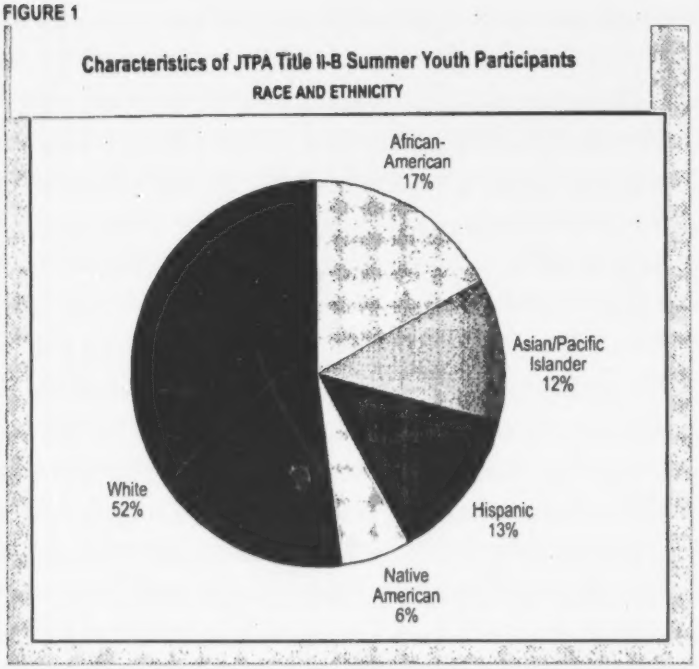
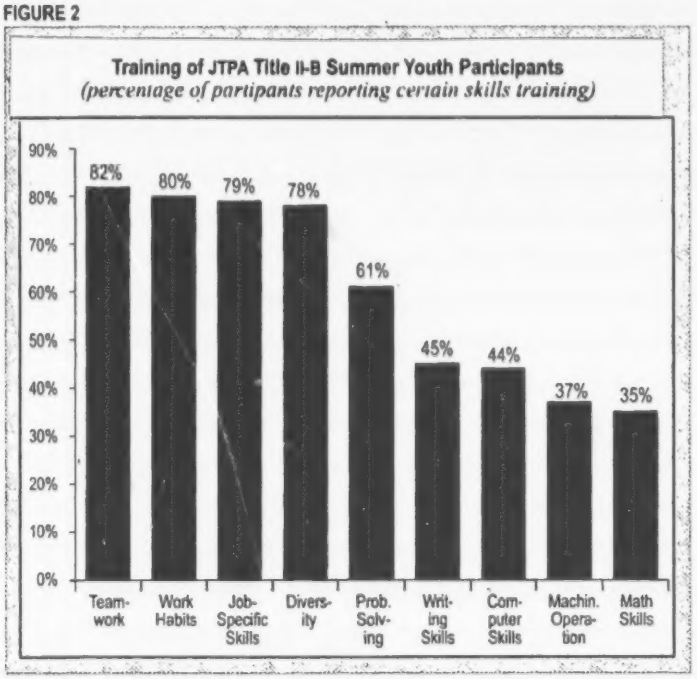


FIGURE 2



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African-American, 12 percent were Asian-American/Pacific Islander, 13 percent were Hispanic, and 6 percent were Native American. (See Figure 1.) Fifty-one percent of the participants were male.

Competency Gains

Survey results indicate that the majority of JTPA Title II-B participants enrolled in order to gain workplace experience (90 percent), on-the-job training (80 percent), and to learn new job skills (77 percent).

When surveyed, 78 percent or more reported that they received training in team work skills, work habits, job-specific skills, and diversity. (See Figure 2.) The majority of participants receiving these types of training said their skills improved a lot. (See Figure 3.) Fewer than half of the participants reported training in writing, computer, machinery operation, and math skills. Only about a third reported that their basic skills (writing and math) improved a lot.

Forty-eight percent of those surveyed reported they were employed seven to nine months after leaving the program. Of those, 62 percent said their training was related to their job.

Participant Satisfaction

Survey results indicate that participants were mostly satisfied with their JTPA Title II-B program. Of the participants, 94 percent reported they were satisfied with the overall quality of the program, and 91 percent were satisfied with the quality of teaching

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and training facilities. Forty-five percent said they had definitely met their educational objectives, and an additional fifty percent partially met them.

The majority of students required assistance with interviewing, job search, resume writing, and job opening information. Most students reported they had received the support services they needed. (See Figure 4.)

Employer Satisfaction

It was not feasible to ask employers about each of the four JTPA programs included in the study (Titles II-A, II-B, II-C, and III). Employers were instead asked about workers who had been trained "by JTPA." Since less than half of the Title II-B former participants were employed soon after the program, employer satisfaction with JTPA is not reported here.

Employment and Earnings

Forty-eight percent of JTPA Title II-B participants reported being employed six to nine months after leaving the program. (Note that a substantial proportion of participants were still in high school at that time.) Forty-two percent were found to have employment reported to ESD during the third quarter after leaving the program. This represents a substantial increase over the 27 percent reported 2 years earlier. Of those who had reported employment, only 12 percent were working full-time (30 or more hours per week). Earnings were somewhat higher than two years ago, but this was largely

FIGURE 3

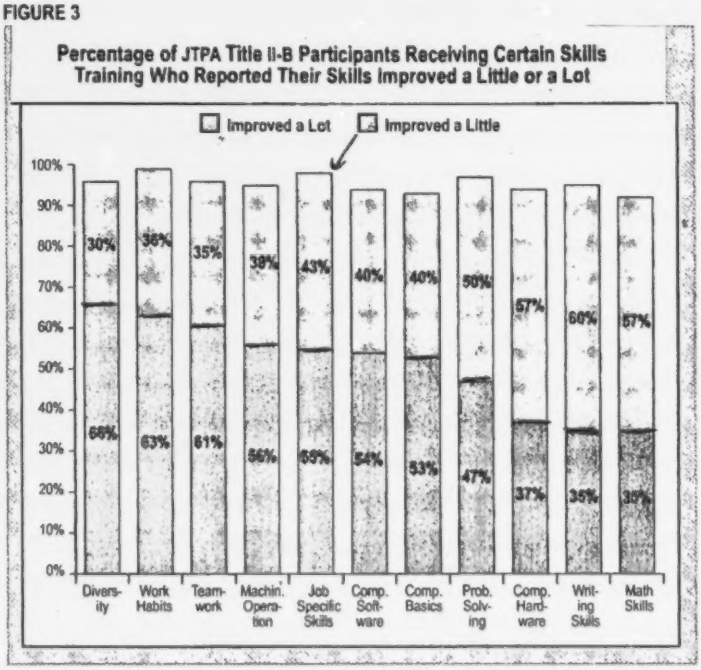

FIGURE 4

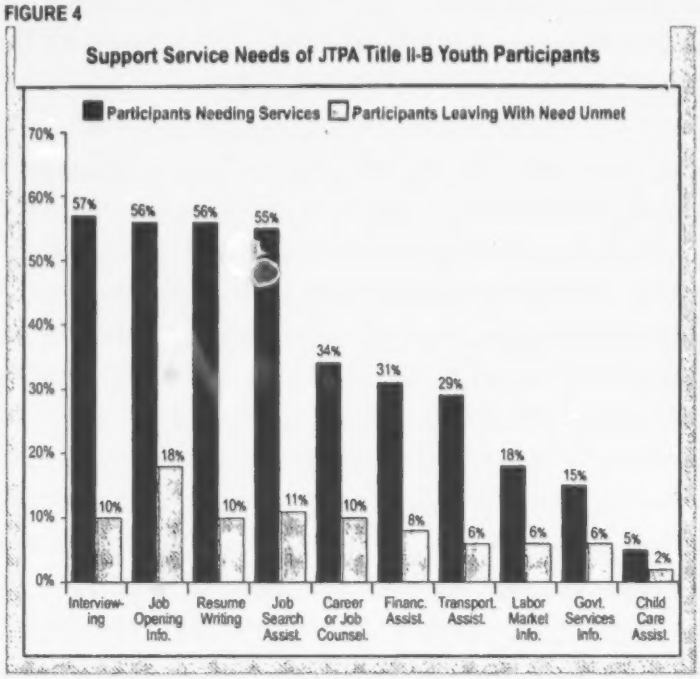

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FIGURE 5

Employment and Earnings of JTPA Title II-B Participants in the Third Quarter After Leaving Program

	1995-96	1997-98
Percentage self-reporting employment when surveyed	29%	43%
Percentage self-reporting employment during the third quarter after leaving program	n/a[2]	48%
Percentage with employment reported by employers to ESD the third quarter after leaving program[3]	27%	42%
Median quarterly hours worked, of those working	149	160
Mean quarterly hours worked, of those working	175	193
Percentage employed full-time of those working (averaging 30 or more hours/week)	9%	12%
Median annualized earnings of those working[4]	$3,292	$3,656
Median hourly wage of those working	$5.71	$5.80
Percentage self-reporting receipt of medical benefits from employer	n/a	21%
Percentage self-reporting receipt of pension benefits from employer	n/a	8%

[2] Not available.

[3] Employment data were obtained from matches with ESD wage files from Washington State, Idaho, Montana, Alaska, and Oregon. The Washington State ESD wage files include between 85 to 90 percent of employment in the state. Federal and military employment records were also included in the match.

[4] Figures are based on the earnings during the third quarter after program exit (i.e., quarterly earnings times four). All wages and earnings are stated in first quarter 1999 dollars. Restricting the analysis to those working and not in school does not significantly change the results.

due to more hours worked. The median wage ($5.80 per hour) was about the same, after controlling for inflation, as that reported for the 1995-96 participants. (See Figure 5.)

Typical earnings for this group are far too low to support even a one-person household. However, given their youth and continuing education, short-term earnings should be expected to be low and not an effective gauge of program performance.

Areas for Improvement

JTPA Title II-B served disadvantaged youth with primarily two kinds of services during the summer: employment for approximately eight weeks and remedial education. Given this population and the limited duration of service, it is not reasonable to expect the program to have major impacts on subsequent employment and earnings. Besides providing gainful work, a major goal of the program was to encourage kids to continue in school.

Most participants said they were satisfied with the overall program and with the level of support services provided. Among those who were employed 6 to 9 months after leaving the program, the majority said that their summer experience was useful to their job.

One area for potential improvement is the provision of basic skills training. Given the program's mandate to provide remedial education, more than 35 to 45 percent of participants should report receiving training in math and writing skills.

Workforce Training Results—2000

APPENDIX

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Workforce Training: Needs and Practices of Employers in Washington State

A survey for
The Washington State Workforce
Training and Education Coordinating Board

July 1999

WHAT IS THIS STUDY ABOUT?

This employer survey was developed to learn about the employee training and retraining needs of firms and organizations doing business in Washington State. The Washington State Legislature has requested that the Workforce Training and Education Coordinating Board (WTECB) conduct an evaluation of the state's major workforce training programs.

WHO IS CONDUCTING THIS STUDY?

Market Data Research is collecting survey responses, re-mailing the survey to firms that do not respond to the first mailing, and tabulating the results of this study for the WTECB. You may also receive a telephone call reminding you to return your questionnaire.

WHAT DO YOU GET FOR RESPONDING?

Results for your region will be supplied to your regional Workforce Investment Board, which will use the information to help coordinate workforce training programs in your area. In addition, we will send you a summary of the results, at your request.

ABOUT THE QUESTIONNAIRE DESIGN:

Most of the questions in this survey have a number code associated with each response. Please circle the number that corresponds to your answer, as shown below:

EXAMPLE: Has your firm/organization hired any new employees in the last 12 months?

1..... Yes
2..... No

Other questions ask you to write your answer in the space provided. Instructions are PRINTED IN CAPITALS. Some instructions ask that you circle only one answer from among a list of possible responses, while others ask you to circle all the answers that apply to you or your company. Please read the instructions and all possible responses for each question before answering.

All of your responses will be kept confidential and used only for research purposes. We have coded the questionnaires so we can determine who has responded, but will not report the results in any way that could identify you. Answers to all questions are voluntary, but we ask that you not skip questions unless the instructions tell you do so.

SKIPPING QUESTIONS THAT DO NOT APPLY:

Some questions do not apply to you. Depending on your response to some questions, you will be instructed to skip over questions that do not apply. In the example below, a person answering "Yes" would continue to the next question. A person answering "No" would skip on to the next question that applies to them, as shown in the skip instructions.

EXAMPLE: In the last 12 months, did your firm/organization have any difficulty finding qualified applicants for any of the jobs you were trying to fill?

1..... Yes
2..... No SKIP TO PAGE 4, SECTION B

Please call Market Data Research's toll-free study line at **1-800-488-3282** if you have questions about this survey.

Workforce Training: Needs and Practices of Washington State Employers 1999

SECTION A: RECENT HIRING AND DIFFICULTIES IN FINDING QUALIFIED APPLICANTS

These first questions are about whether you have hired new employees in the last 12 months and about any difficulties you may have experienced in finding qualified applicants.

1. Has your firm/organization hired any new employees in the last twelve (12) months?

   1 ..... Yes

   2 ..... No

2. Please give your best estimate of the number of job openings you tried to fill in the last 12 months.

   _____ number of job openings

3. In the last 12 months, did your firm/organization have any difficulty finding qualified applicants for any of the jobs you were trying to fill?

   1 ..... Yes

   2..... No SKIP TO PAGE 4, SECTION B

4. Please indicate the occupation for which your firm/organization had the most difficulty finding qualified applicants in the last 12 months.

   _____

5. Sometimes firms/organizations may experience difficulty in finding qualified applicants with the formal education required to perform certain jobs. In general, how much difficulty has your firm/organization experienced in the last 12 months finding qualified applications with the different education levels listed below? PLEASE CIRCLE ONLY ONE NUMBER IN EACH ROW. IF YOU DID NOT NEED EMPLOYEES WITH THAT LEVEL OF EDUCATION, CIRCLE CODE 6 FOR "NOT APPLICABLE" IN THAT ROW.

	Much Difficulty	Some Difficulty	No Difficulty	Not Applicable
a. Neither a high school diploma nor a GED	1	2	3	6
b. A GED or high school diploma	1	2	3	6
c. A high school diploma only	1	2	3	6
d. Some college course work beyond high school.	1	2	3	6
e. A vocational diploma or certificate	1	2	3	6
f. A vocational associate degree	1	2	3	6
g. An academic associate (A.A. or A.S.) degree ..	1	2	3	6
h. A baccalaureate (B.A. or B.S.) degree	1	2	3	6
i. A master's (M.A. or M.S.), doctoral (Ph.D.) or professional degree from a college or university	1	2	3	6

6. Firms/organizations may also experience difficulty finding qualified applicants with certain kinds of abilities and job skills. How much difficulty has your firm/organization had finding employees with the following skills?

	Much Difficulty	Some Difficulty	No Difficulty	Not Applicable
a. Reading skills	1	2	3	6
b. Writing skills	1	2	3	6
c. Math skills	1	2	3	6
d. Occupation-specific skills	1	2	3	6
e. Computer skills	1	2	3	6
f. Team work skills	1	2	3	6
g. Problem solving or critical thinking skills	1	2	3	6
h. Communication skills	1	2	3	6
i. Positive work habits and attitudes	1	2	3	6
j. Ability to accept supervision	1	2	3	6
k. Ability to adapt to changes in duties and responsibilities	1	2	3	6

7. Which of the following has resulted from your firm's difficulty finding qualified applicants? PLEASE CIRCLE YES OR NO FOR EACH STATEMENT.

		Yes	No
a.	Lowered overall productivity	1	2
b.	Reduced product or service quality	1	2
c.	Reduced production output or sales	1	2
d.	Prevented your firm/organization from expanding its facilities	1	2
e.	Prevented your firm/organization from developing new products or services	1	2
f.	Caused your firm/organization to move some operations out of Washington State	1	2

SECTION B: YOUR SATISFACTION WITH EMPLOYEES FROM DIFFERENT EDUCATION PROGRAMS

These next questions are about the skill levels of employees trained by various types of educational institutions or training programs. We are interested in anyone your firm/organization hired in the last 12 months who attended, or was trained by, one of these six types of institutions or programs.

- High school vocational education programs (Questions 8-10)
- Community or technical colleges vocational training programs (Questions 11-13)
- Private Industry Council (PIC) or Job Training Partnership Act (JTPA) programs (Questions 14-16)
- Private vocational/technical schools (Questions 17-19)
- Apprenticeship programs (Questions 20-22)
- Adult basic skills classes such as GED and English as a Second Language (Questions 23-35)

There will be one page of questions for each program. The question at the top of each page provides additional information that helps to identify the programs and asks if you hired any employees who completed the program. Please answer this question for each program. Please answer the questions about your satisfaction with the skills and productivity of these employees only when they apply to you.

If you did not hire any workers in the past 12 months, please answer "No" to the first question on pages 5 through 10, and move to Section C, which asks about your future needs for skilled employees.

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High School Vocational Education Programs

8. In the last 12 months, has your firm/organization hired any new employees who had recently completed a vocational education program at a high school or vocational skills center?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 6, QUESTION 11

9. How satisfied was your firm/organization with each of the skills listed below of new employees who had recently completed a vocational education program at a high school or vocational skills center? PLEASE CIRCLE ONLY ONE NUMBER IN EACH ROW.

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Reading skills	1	2	3	4	6
b. Writing skills	1	2	3	4	6
c. Math skills	1	2	3	4	6
d. Occupation-specific skills needed to do the job	1	2	3	4	6
e. Computer skills	1	2	3	4	6
f. Team work skills	1	2	3	4	6
g. Problem solving or critical thinking skills	1	2	3	4	6
h. Communication skills	1	2	3	4	6
i. Positive work habits and attitudes	1	2	3	4	6
j. Ability to accept supervision ...	1	2	3	4	6
k. Ability to adapt to changes in duties and responsibilities	1	2	3	4	6

10. How satisfied was your firm/organization with the overall productivity and overall quality of the work performed by new employees who had recently completed a vocational education program at a high school or vocational skills center?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Overall productivity	1	2	3	4	6
b. Overall quality of work	1	2	3	4	6

Community or Technical College

11. In the last 12 months, has your firm/organization hired any new employees who had recently completed a vocational certificate or vocational degree program at a community or technical college? [PLEASE NOTE: This question refers to vocational training only. It does not pertain to anyone who pursued general liberal arts training leading to an associate of arts degree (A.A.) from a community college.]

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 7, QUESTION 14

12. How satisfied was your firm/organization with each of the skills listed below of new employees who had recently completed a vocational education program at a high school or vocational skills center? PLEASE CIRCLE ONLY ONE NUMBER IN EACH ROW.

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Reading skills	1	2	3	4	6
b. Writing skills	1	2	3	4	6
c. Math skills	1	2	3	4	6
d. Occupation-specific skills needed to do the job	1	2	3	4	6
e. Computer skills	1	2	3	4	6
f. Team work skills	1	2	3	4	6
g. Problem solving or critical thinking skills	1	2	3	4	6
h. Communication skills	1	2	3	4	6
i. Positive work habits and attitudes	1	2	3	4	6
j. Ability to accept supervision	1	2	3	4	6
k. Ability to adapt to changes in duties and responsibilities	1	2	3	4	6

13. How satisfied was your firm/organization with the overall productivity and overall quality of the work performed by new employees who had recently completed a vocational certificate or vocational degree program at a community or technical college?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Overall productivity	1	2	3	4	6
b. Overall quality of work	1	2	3	4	6

Private Industry Council/JTPA

14. In the last 12 months, has your firm/organization hired any new employees who had recently completed a Private Industry Council or JTPA training program?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 8, QUESTION 17

15. How satisfied was your firm/organization with each of the skills listed below of new employees who had recently completed a Private Industry Council or JTPA training program? PLEASE CIRCLE ONLY ONE NUMBER IN EACH ROW.

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Reading skills	1	2	3	4	6
b. Writing skills	1	2	3	4	6
c. Math skills	1	2	3	4	6
d. Occupation-specific skills needed to do the job	1	2	3	4	6
e. Computer skills	1	2	3	4	6
f. Team work skills	1	2	3	4	6
g. Problem solving or critical thinking skills	1	2	3	4	6
h. Communication skills	1	2	3	4	6
i. Positive work habits and attitudes	1	2	3	4	6
j. Ability to accept supervision ..	1	2	3	4	6
k. Ability to adapt to changes in duties and responsibilities	1	2	3	4	6

16. How satisfied was your firm/organization with the overall productivity and overall quality of the work performed by new employees who had recently completed a Private Industry Council or JTPA training program?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Overall productivity	1	2	3	4	6
b. Overall quality of work	1	2	3	4	6

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Private Vocational/Technical School

17. In the last 12 months, has your firm/organization hired any new employees who had recently completed a training program at a private vocational or technical school?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 9, QUESTION 20

18. How satisfied was your firm/organization with each of the skills listed below of new employees who had recently completed a training program at a private vocational or technical school? PLEASE CIRCLE ONLY ONE NUMBER IN EACH ROW.

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Reading skills	1	2	3	4	6
b. Writing skills	1	2	3	4	6
c. Math skills	1	2	3	4	6
d. Occupation-specific skills needed to do the job	1	2	3	4	6
e. Computer skills	1	2	3	4	6
f. Team work skills	1	2	3	4	6
g. Problem solving or critical thinking skills	1	2	3	4	6
h. Communication skills	1	2	3	4	6
i. Positive work habits and attitudes	1	2	3	4	6
j. Ability to accept supervision ...	1	2	3	4	6
k. Ability to adapt to changes in duties and responsibilities	1	2	3	4	6

19. How satisfied was your firm/organization with the overall productivity and overall quality of the work performed by new employees who had recently completed a training program at a private vocational or technical school?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Overall productivity	1	2	3	4	6
b. Overall quality of work	1	2	3	4	6

Apprenticeship Programs

20. In the last 12 months, has your firm/organization hired any new employees who had recently completed an apprenticeship program?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 10, QUESTION 23

21. How satisfied was your firm/organization with each of the skills listed below of new employees who had recently completed an apprenticeship program? PLEASE CIRCLE ONLY ONE NUMBER IN EACH ROW.

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Reading skills	1	2	3	4	6
b. Writing skills	1	2	3	4	6
c. Math skills	1	2	3	4	6
d. Occupation-specific skills needed to do the job	1	2	3	4	6
e. Computer skills	1	2	3	4	6
f. Team work skills	1	2	3	4	6
g. Problem solving or critical thinking skills	1	2	3	4	6
h. Communication skills	1	2	3	4	6
i. Positive work habits and attitudes	1	2	3	4	6
j. Ability to accept supervision ..	1	2	3	4	6
k. Ability to adapt to changes in duties and responsibilities	1	2	3	4	6

22. How satisfied was your firm/organization with the overall productivity and overall quality of the work performed by new employees who had recently completed an apprenticeship program?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Overall productivity	1	2	3	4	6
b. Overall quality of work	1	2	3	4	6

Adult Basic Skills

23. In the last 12 months, has your firm/organization hired any new employees who had recently participated in any adult basic skills classes (such as GED and English as a Second Language) at a community or technical college or community based organization?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 11, SECTION C

24. How satisfied was your firm/organization with each of the skills listed below of new employees who had recently participated in any adult basic skills classes (such as GED and English as a Second Language) at a community or technical college or community based organization? PLEASE CIRCLE ONLY ONE NUMBER IN EACH ROW.

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Reading skills	1	2	3	4	6
b. Writing skills	1	2	3	4	6
c. Math skills	1	2	3	4	6
d. Occupation-specific skills needed to do the job	1	2	3	4	6
e. Computer skills	1	2	3	4	6
f. Team work skills	1	2	3	4	6
g. Problem solving or critical thinking skills	1	2	3	4	6
h. Communication skills	1	2	3	4	6
i. Positive work habits and attitudes	1	2	3	4	6
j. Ability to accept supervision ...	1	2	3	4	6
k. Ability to adapt to changes in duties and responsibilities	1	2	3	4	6

25. How satisfied was your firm/organization with the overall productivity and overall quality of the work performed by new employees who had recently participated in any adult basic skills classes (such as GED and English as a Second Language) at a community or technical college or community based organization?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Able to Evaluate
a. Overall productivity	1	2	3	4	6
b. Overall quality of work	1	2	3	4	6

SECTION C: FUTURE NEEDS FOR SKILLED EMPLOYEES

26. Now we would like you to think about future needs of your firm/organization. How will your firm's/organization's need for employees with each of the types of education listed below change in the next five years?

	Employees with	Increase	Stay About the Same	Decrease	Not Needed
a.	Neither a high school diploma nor a GED	1	2	3	6
b.	A GED or high school diploma	1	2	3	6
c.	A high school diploma only	1	2	3	6
d.	Some college course work beyond high school	1	2	3	6
e.	A vocational diploma or certificate	1	2	3	6
f.	A vocational associate degree	1	2	3	6
g.	An academic associate (A.A. or A.S.) degree	1	2	3	6
h.	A baccalaureate (B.A. or B.S.) degree	1	2	3	6
i.	A master's (M.A. or M.S.), doctoral (Ph.D.), or professional degree from a college or university ...	1	2	3	6

27. Does your firm/organization have an arrangement with any education and training providers where your firm/organization provides on-the-job training, work experience, internship programs, or other actual job experience to their students?

		Yes	No
a.	On-the-job training	1	2
b.	Work experience	1	2
c.	Internships	1	2
d.	Other job experiences	1	2

28. With which of the following education and training providers does your firm/organization have a formal agreement to provide on-the-job training, work experience, co-op, internship programs, or other actual job experience to their students?

		Yes	No
a.	Vocational programs through high school or skill centers	1	2
b.	Community and/or technical colleges	1	2
c.	Four-year colleges and/or universities	1	2

SECTION D: EMPLOYEE TRAINING YOU PROVIDE

29. In the last three years, have the skills required to adequately perform production or support jobs (primary or front-line services or support jobs) increased, decreased, or remained the same?

1 ..... Increased
2 ..... Remained the Same
3 ..... Decreased

CLASSROOM TRAINING THAT YOU PROVIDE

These next questions are about classroom training, workshops, or seminars your firm/organization uses to train its employees. Please count only types of training that last four hours or longer (a half day). This training may be offered at the worksite or at another location and may occur during the working hours or at other times. These may be conducted either by personnel from your firm/organization or by sources outside your firm/organization. Examples include seminars, lectures, workshops, or audio-visual presentations. If you provide no classroom training, please answer the next two questions and skip to page 20, question 47, which asks about on-the-job training.

30. Did your firm/organization provide or pay for any classroom training, workshops, or seminars (lasting at least four hours) for any employees in the last 12 months?

1 ..... Yes ™ SKIP TO PAGE 13, QUESTION 32
2 ..... No

31. Which of the following are reasons why your firm/organization did not provide or pay for classroom training, workshops, or seminars (lasting at least four hours) in the last 12 months. PLEASE CIRCLE YES OR NO FOR EACH STATEMENT.

		Yes	No
a.	Skilled workers are readily hired	1	2
b.	On-the-job training satisfies our needs	1	2
c.	Employees we hire are adequately trained by previous employers	1	2
d.	Training does not provide any significant benefits for our needs	1	2
e.	Time for classroom training, workshops, and seminars is not available	1	2
f.	Cost of classroom training, workshops, and seminars is too high	1	2
g.	Employee turnover is too high to justify training	1	2
h.	Other, specify: _____		

PLEASE SKIP TO PAGE 20, QUESTION 47

32. For each type of employee listed below, approximately what percentage received classroom training, workshops, or seminars (lasting at least four hours) in the last 12 months? If your answer is "none" for a particular type of employee, enter a zero (0) on that line. [PLEASE NOTE: Because we are interested in the percentage of each type of employee that receives training, the numbers you enter below will **not necessarily** add up to 100.]

a. Managerial and administrative occupations—top and middle-level managers, administrators, and executives whose primary duties are policy making, planning, staffing, directing, or controlling the activities of establishments ..... _____%

b. Professional occupations—persons concerned with the theoretical or practical aspects of fields (e.g., science, art, education, law, and business relations) where substantial postsecondary educational preparation, or equivalent on-the-job training or experience, is required ..... _____%

c. Technical and paraprofessional occupations—technicians, programmers, and people who provide technical support (especially in health, engineering, aviation, computer programming, and law) where positions require at least some postsecondary educational preparation or equivalent on-the-job training ..... _____%

d. Marketing and sales-related occupations—persons selling goods or services and other individuals directly related to sales ..... _____%

e. Clerical and administrative support occupations—persons performing clerical tasks, such as typing, filing, operating a computer, keeping records (personnel, stock, producing, billing, etc.), and preparing and distributing mail _____%

f. Service occupations—workers in occupations relating to protective service, food service, health assisting service, cleaning and building service, and personal service _____%

g. Production, construction, operation, maintenance, and material-handling occupations—all skilled, semi-skilled, and unskilled workers performing machine and manual tasks involving production, construction, operation, maintenance, repair, and material-handling ..... _____%

h. Agricultural, forestry, fishing, and related occupations—workers concerned with agricultural production, forestry, and fishing. Also included in this group are agriculture-related workers, such as animal caretakers and groundskeepers ..... _____%

i. Other, specify: _____ _____%

33. Approximately what percent of your current employees in each category would you say need further training in a formal program, such as that taught at a community college or private vocational-technical school, in order to reach the current level of productivity and competence that your company needs. [PLEASE NOTE: Because we are interested in the percentage of each type of employee that receives training, the numbers you enter below will **not necessarily** add up to 100.]

a. Managerial and administrative occupations ..... _____%
b. Professional occupations ..... _____%
c. Technical and paraprofessional occupations ..... _____%
d. Marketing and sales-related occupations ..... _____%
e. Clerical and administrative support occupations ..... _____%
f. Service occupations ..... _____%
g. Production, construction, operation, maintenance, and material-handling occupations ..... _____%
h. Agricultural, forestry, fishing, and related ..... _____%
i. Other, specify: _____ _____%

34. In the last three (3) years, has the percentage of your employees who receive classroom training, workshops, or seminars of some kind increased, decreased, or stayed about the same?

1 ..... Increased
2 ..... Stayed about the same ™ SKIP TO PAGE 15, QUESTION 36
3 ..... Decreased ™ SKIP TO PAGE 15, QUESTION 36

35. Which of the following are reasons for your increase in training? PLEASE CIRCLE YES OR NO FOR EACH STATEMENT.

		Yes	No
a.	Changes in products or services you provide	1	2
b.	Changes in technology	1	2
c.	Changes in the organization of work	1	2
d.	Need to improve the quality of your output	1	2
e.	Need to improve worker productivity	1	2
f.	New hires did not have necessary skills	1	2
g.	To help employees develop more positive attitudes and work habits	1	2
h.	To keep up with competition from foreign countries	1	2
i.	To keep up with competitors at home	1	2
j.	to improve the morale of employees	1	2
k.	To develop a more flexible and versatile workforce	1	2
l.	To promote the personal or career development of employees	1	2
m.	Legal requirements forced us to increase training	1	2
n.	Other, specify: _____		

TRAINING YOU PROVIDE THROUGH BY PUBLIC COMMUNITY OR TECHNICAL COLLEGES

36. Has your firm/organization ever had an arrangement with a community or technical college to provide education and training services to your employees?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 16, QUESTION 40

37. Does your firm/organization currently have an arrangement with a community or technical college to provide education and training services to your employees?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 16, QUESTION 40

38. Why did you select a community or technical college to conduct training? PLEASE CIRCLE YES OR NO FOR EACH STATEMENT.

		Yes	No
a.	Cost-effective value for money	1	2
b.	Quality of instruction	1	2
c.	Community or technical college customized the training program for our needs	1	2
d.	Convenient location	1	2
e.	Training programs referred to us by other businesses	1	2
f.	Contracted with community or technical college in past with satisfactory results	1	2
g.	Other, specify: _____		

39. Please rate the most recent community or technical college training provided for your employees in each of the following areas.

	Very Good	Good	Poor	Very Poor	Not Applicable
a. The responsiveness of the college to your particular needs	1	2	3	4	6
b. The amount of skill your employees gained from the training	1	2	3	4	6
c. The timeliness of the training	1	2	3	4	6
d. The cost of the training	1	2	3	4	6
e. The convenience of the hours of the courses	1	2	3	4	6
f. The convenience of the location	1	2	3	4	6
g. The quality of the equipment	1	2	3	4	6
h. The quality of training facilities	1	2	3	4	6
i. The technical competence of the instructor(s)	1	2	3	4	6
j. The administrative simplicity in making these arrangements (red tape)	1	2	3	4	6

PLEASE SKIP TO PAGE 17, QUESTION 41

40. Listed below are some reasons why firms/organizations may not have arrangements with community or technical colleges to train their employees. Please indicate which of the following are reasons why your firm/organization does not have such an arrangement. PLEASE CIRCLE YES OR NO FOR EACH STATEMENT.

	Yes	No
a. The cost would be too high	1	2
b. Our firm/organization conducts its own training	1	2
c. Our firm/organization only uses private education and training providers	1	2
d. Public community or technical colleges do not offer the type of training our employees need	1	2
e. Our firm/organization has been able to find all the qualified workers that we need	1	2
f. Community or technical colleges have too much red tape/administrative bureaucracy	1	2
g. We are not aware of what the college offers	1	2
h. Other, specify: _____		

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TYPES OF CLASSROOM TRAINING THAT YOU PROVIDE

Next, we would like to ask specifically about three types of classroom training you may have provided to your employees. These types of training are: Work-place practices, Basic skills, and Job-specific skills.

Work-place practices may include training in policies and practices that affect employee relations (e.g., work-place diversity or sexual harassment training), affect employee health and safety (e.g., work-place safety and health requirements), and the work environment (e.g., how to work in teams, how to improve work performance, etc.).

41. In the last 12 months, did your firm/organization provide or pay for classroom training, workshops, or seminars (lasting at least four hours) in work-place practices for any employee?

1 ..... Yes
2 ..... No

Basic skills training is training in reading, writing, arithmetic, and English language skills.

42. In the past 12 months, did your firm/organization provide or pay for classroom training, workshops, or seminars (lasting at least four hours) in basic skills for any employee?

1 ..... Yes
2 ..... No

Job-specific skills training includes training that upgrades employee skills, extends employee skills, or otherwise qualifies workers for a specific occupation.

43. In the past 12 months, did your firm/organization provide or pay for classroom training, workshops, or seminars (lasting at least four hours) in job-specific skills for any employee?

1 ..... Yes
2 ..... No ™ SKIP TO PAGE 20, QUESTION 45

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44. Have you used any of the following training providers for job-specific skills training in the last 12 months? *For each one used*, to what extent are you satisfied with the job-specific skills training you received from that training provider?

		Didn't Use	Used	*If Used . . .*			
				Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
a.	Our firm's/organization's personnel	2	1™	1	2	3	4
b.	Community or technical college	2	1™	1	2	3	4
c.	Four-year college or university	2	1™	1	2	3	4
d.	Other government sponsored training and education programs Specify: _____	2	1™	1	2	3	4
e.	Private training contractors/consultants	2	1™	1	2	3	4
f.	Private vocational/ technical schools	2	1™	1	2	3	4
g.	Apprenticeship	2	1™	1	2	3	4
h.	Industry or trade associations	2	1™	1	2	3	4
i.	Unions	2	1™	1	2	3	4
j.	Equipment suppliers or buyers	2	1™	1	2	3	4
k.	Other private provider. Specify: _____	2	1™	1	2	3	4

44. (Continued) *For each training provider that you used,* to what extent did the providers meet your training objectives?

			If Used (See Page 18), were your objectives . . .			
			Definitely Met	Partially Met	Not Met at all	Don't Know
TM	a.	Our firm's/organization's personnel	1	2	3	4
TM	b.	Community or technical college	1	2	3	4
TM	c.	Four-year college or university	1	2	3	4
TM	d.	Other government sponsored training and education programs Specify: _____	1	2	3	4
TM	e.	Private training contractors/consultants	1	2	3	4
TM	f.	Private vocational/ technical schools	1	2	3	4
TM	g.	Apprenticeship	1	2	3	4
TM	h.	Industry or trade associations	1	2	3	4
TM	i.	Unions	1	2	3	4
TM	j.	Equipment suppliers or buyers	1	2	3	4
TM	k.	Other private provider. Specify: _____	1	2	3	4

TUITION REIMBURSEMENT THAT YOU PROVIDE

The next questions refer to tuition reimbursement, which is one way that some employers pay for classroom training.

45. Did your firm/organization have a tuition reimbursement program for any employee during the past 12 months?

    1 ..... Yes
    2 ..... No

46. Was your tuition reimbursement program restricted to job-related training only?

    1 ..... Yes
    2 ..... No

ON-THE-JOB TRAINING THAT YOU PROVIDE

These next questions refer to on-the-job training. During on-the-job training, the worker is learning from someone else the duties that the job requires while performing work. One example is having a co-worker teach an employee how to operate a machine. Another example is having someone show a new employee the bookkeeping system. In answering these questions, please include all employees: full-time, part-time, temporary, seasonal, salaried, and hourly.

47. Does your firm/organization provide any type of on-the-job training for its employees?

    1 ..... Yes
    2 ..... No ™ SKIP TO PAGE 22, SECTION E

48. For each type of employee listed below, approximately what percentage received on-the-job training in the last 12 months? If your answer is "none" for a particular type of employee, enter a zero (0) on that line. [PLEASE NOTE: Because we are interested in the percentage of each type of employee that receives training, the numbers you enter below will not necessarily add up to 100.]

a. Managerial and administrative occupations—top and middle-level managers, administrators, and executives whose primary duties are policy making, planning, staffing, directing, or controlling the activities of establishments ..... _____%

b. Professional occupations—persons concerned with the theoretical or practical aspects of fields (e.g., science, art, education, law, and business relations) where substantial postsecondary educational preparation, or equivalent on-the-job training or experience, is required ..... _____%

c. Technical and paraprofessional occupations—technicians, programmers, and people who provide technical support (especially in health, engineering, aviation, computer programming, and law) where positions require at least some postsecondary educational preparation or equivalent on-the-job training ..... _____%

d. Marketing and sales-related occupations—persons selling goods or services and other individuals directly related to sales ..... _____%

e. Clerical and administrative support occupations—persons performing clerical tasks, such as typing, filing, operating a computer, keeping records (personnel, stock, producing, billing, etc.), and preparing and distributing mail _____%

f. Service occupations—workers in occupations relating to protective service, food service, health assisting service, cleaning and building service, and personal service _____%

g. Production, construction, operation, maintenance, and material-handling occupations—of all skilled, semi-skilled, and unskilled workers performing machine and manual tasks involving production, construction, operation, maintenance, repair, and material-handling ..... _____%

h. Agricultural, forestry, fishing, and related occupations—workers concerned with agricultural production, forestry, and fishing. Also included in this group are agriculture-related workers, such as animal caretakers and groundskeepers ..... _____%

i. Other, specify: _____ _____%

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SECTION E: BACKGROUND INFORMATION ON YOUR FIRM

49. In which Washington State county do you employ the most workers (based on worksite location)?

_____

50. Listed below are eight major occupational groups. Please fill in the blanks with the percentage of your firm's/organization's current employees who are in each occupational group. Write zero (0) if you have no employees in an occupational group. Your answers to parts a through i of this question should total 100 percent.

a. Managerial and administrative occupations—top and middle-level managers, administrators, and executives whose primary duties are policy making, planning, staffing, directing, or controlling the activities of establishments ..... _____%

b. Professional occupations—persons concerned with the theoretical or practical aspects of fields (e.g., science, art, education, law, and business relations) where substantial postsecondary educational preparation, or equivalent on-the-job training or experience, is required ..... _____%

c. Technical and paraprofessional occupations—technicians, programmers, and people who provide technical support (especially in health, engineering, aviation, computer programming, and law) where positions require at least some postsecondary educational preparation or equivalent on-the-job training ..... _____%

d. Marketing and sales-related occupations—persons selling goods or services and other individuals directly related to sales ..... _____%

e. Clerical and administrative support occupations—persons performing clerical tasks, such as typing, filing, operating a computer, keeping records (personnel, stock, producing, billing, etc.), and preparing and distributing mail _____%

f. Service occupations—workers in occupations relating to protective service, food service, health assisting service, cleaning and building service, and personal service . _____%

g. Production, construction, operation, maintenance, and material-handling occupations—of all skilled, semi-skilled, and unskilled workers performing machine and manual tasks involving production, construction, operation, maintenance, repair, and material-handling ..... _____%

h. Agricultural, forestry, fishing, and related occupations—workers concerned with agricultural production, forestry, and fishing. Also included in this group are agriculture-related workers, such as animal caretakers and groundskeepers ..... _____%

i. Other, specify: _____ _____%

51. Of all employees listed in Question 50 above, what percentage are in each of the following three categories? Write zero (0) if you have no employees in a category. Your answers to parts a through c of this question should total 100 percent.

a.	Permanent part-time workers (working less than 30 hours per week)	_____%
b.	Permanent full-time workers (working at least 30 hours per week)	_____%
c.	Hired directly by the firms on a temporary basis	_____%
	Total	100%

52. Are most of your employees covered by any of the following?

		Yes	No
a.	Paid vacation/holidays	1	2
b.	Paid sick leave	1	2
c.	Medical or health insurance	1	2
d.	Pension plan	1	2
e.	Childcare subsidies	1	2

53. What percent of your firm's/organization's current employees are in jobs that require each of the educational levels listed below? Write zero (0) if you have no employees in a category. Your answers to parts a through i of this question should total 100 percent.

a.	Neither a high school diploma nor a GED	_____%
b.	A GED or high school diploma	_____%
c.	A high school diploma only	_____%
d.	Some college course work of training beyond high school	_____%
e.	A vocational diploma or certificate	_____%
f.	A vocational associate degree	_____%
g.	An academic associate (A.A. or A.S.) degree	_____%
h.	A baccalaureate (B.A. or B.S. degree)	_____%
i.	A master's (M.A. or M.S.), doctoral (Ph.D.), or professional degree from a college or university	_____%
	Total	100%

54. What percentage of your non-supervisory employees use computers in their jobs?

_____% using computers

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55. Now we would like to know if your firm/organization uses various work-place practices that some employers are currently using. Please indicate whether or not your firm/organization is using any of the practices listed below.

		Yes	No
a.	Organize employees into self-managed work teams	1	2
b.	Train employees to do a number of different jobs (cross training)	1	2
c.	Have a formal job-sharing or flextime program	1	2
d.	Regularly rotate employees among different jobs (job rotation)	1	2
e.	Link employee compensation to performance	1	2
f.	Organize regularly scheduled meetings with managers/supervisor and workers to discuss ways to improve workplace practices	1	2
g.	Have a formal Total Quality Management or Continuous Quality Improvement Program	1	2
h.	Compare your practices and performance with other firms'/ organizations' practices and performance (benchmarking)	1	2
i.	Manage using just-in-time inventories	1	2
j.	Involve co-worker review of employee performance	1	2
k.	Use quality circles	1	2

	Yes	No
56. Would you like a complimentary copy of a summary of survey results?	1	2

57. Please indicate on the lines below the name of a person at your firm/organization who we may contact if we have any questions about your survey or who should receive results.

Contact Person: _____

Title: _____

Telephone Number: (_____)_____

Fax Number: (_____)_____

E-Mail Address _____

58. Would you find it easier to answer this survey in another format?

		Yes	No
a.	Computer disk	1	2
b.	Internet Web Page	1	2
c.	FAX	1	2
d.	E-mail	1	2
e.	Other _____	1	2

YOUR COMMENTS?

Please use the space provided below for your comments about this survey. Feel free to make suggestions about important topics or issues that we may not have covered. And let us know about any problems you encountered in the survey, such as unclear instructions or questions that were difficult to understand.

Thank you for your time and effort in participating in this survey. Please return the complete survey in the postage paid envelope to:

Market Data Research Corporation
308 Tacoma Avenue South
Tacoma, WA 98402

For Questions, Call 1-800-488-3282 toll-free or contact
esurveys@marketdataresearch.com

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MODEL SURVEY

Sample Information	Sample Disposition Categories
Name of Student	Complete: Not an Initial Refusal
Telephone Number	Complete: Converted Initial Refusal
Address	Final Refusal: Conversion Unsuccessful
City, State, Zip Code	Initial Refusal: Conversion Not Yet Attempted
	Initial Refusal: Hostile
START DATE (month/year)	Terminated Interview (Record Q#)
END DATE (month/year)	Deaf/Language Problem
NAME OF INSTITUTION	Named Respondent Denies Participation
NAME OF PROGRAM/COURSE	Respondent Not Available (HH Contacted)
	No Answer/Busy/Answer Machine >8 Attempts
	No Answer/Busy/Answer Machine < 8 Attempts
	Wrong/Disconnected Number
	Computer or Fax Line

INTRODUCTION TO PERSON ANSWERING THE TELEPHONE

Hello, may I speak to (the parent of guardian of) <name>?

Hello, this is (FIRST AND LAST NAME) calling from Washington State University on behalf of Washington's Workforce Training Board. We are conducting a survey evaluating the service you received (from the <name of program> program / at (the) <name of institution>) and need your opinions to improve the program and its service. A letter was mailed to you recently describing this survey. Do you remember receiving it?

Yes
No {INTERVIEWER SAY: "It was just a brief letter from WSU to let you know we would be calling."}

Call back codes .....
Doesn't Remember Training .....
Don't Know .....
Refusal .....

INTRODUCTION TO PARENT OF CHILD RESPONDENT

I'm calling from Washington State University. We are conducting a survey evaluating the training programs and services <NAME> took from the JTPA youth program. Since our records indicate (he/she) is under 18, before we talk to (him/her), we need to receive permission from (his/her) parent or guardian so that we can talk to <NAME>.

Parent/guardian answered phone 1
Parent/guardian did not answer phone 2
Not available 3

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No parent or guardian lives here, only R 4
Refusals 5
Wrong Number 6
Respondent has a Communication Barrier 7
Other Termination Code 8

<NAME> was randomly selected from all participants in the JTPA youth program. None of the information provided will be used against <NAME> or your family OR to alter any benefits to which you are entitled.

This interview is voluntary and any information that <FIRST NAME> provides will be kept confidential and will not be associated with any name or identification. (He/She) does not have to answer any questions (he/she) doesn't want to and (he/she) can top the interview at any time. We would very much like to interview <FIRST NAME> about (his/her) experiences in the JTPA youth program, but we do need your permission to do so. May I have permission to interview <FIRST NAME>?

1 = Yes
2 = No (Refuses Permission)

Thank you very much. As it is very important for the survey that <NAME> feels comfortable answering these questions, we usually like to schedule a time when (he/she) can answer the questions without interruptions. Could I speak with <NAME> now, or could you tell me when would be a good time to cal (him/her) back?

Set callback 1
Can do it now 2

CONFIDENTIALITY

This interview is completely voluntary and has been approved by Washington State University. While portions of this interview may be monitored by my supervisor, the information you provide will remain confidential. If I come to any question that you would prefer not to answer, just let me know and I will skip over it. OK?

Yes 1
No [INTERVIEWER, SAY: "When would be a better time to call back?" CODE AS CB] 2
Refusal 2

IF NECESSARY

Your opinions will be kept confidential and used only for research purposes. We are not selling anything; we are conducting research and would like your opinion. The interview should take 20 to 25 minutes.

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START OF STUDY

As we talk, I'd like you to think about the training program you took between <start date of training> and <graduation date> (for the <name of program>) / (<at the name of school>).

(For Apprenticeship Participants) As we talk, I would like you to think back to the apprenticeship training you took between (start date) and (exit date). I will be asking questions about both the on-the-job training you received as part of your apprenticeship to become a(n) <name of the trade>, and the classroom instruction portion of the apprenticeship

DOL Customer Satisfaction Questions

Q-1. First, we're going to ask about services offered (<from your apprenticeship program>, <from your JTPA adult program>, <from your JTPA worker program>, <from your JTPA youth program>, <from your high school vocational program>, or at the <name of college>). To understand what services you received, I'm going to read a list. Please answer "Yes" to all that apply:

Did you receive:

a.	Career counseling	1	Yes	2	No
b.	Help with job search	1	Yes	2	No
c.	Occupational training	1	Yes	2	No
d.	Some other type of training	1	Yes	2	No
e	Some other type of service	1	Yes	2	No

Please describe: (Record but do not code)

I'll ask more about the specific services you received later, but I'd like to find out if you would recommend these services to others:

Q-1a. Would you recommend the services you received (<from your apprenticeship program>, <from your JTPA adult program>, <from your JTPA worker program>, <from your JTPA youth program>, <from your high school vocational program>, or at the <name of college>) to friends or colleagues with similar needs? Would you say . . .

1-Yes, definitely
2-Yes, probably
3-Hard to say
4-No, probably not
5-No, definitely not
6-Don't Know
7-Refused to Answer

Q-2. Would you use the services provided (<from your apprenticeship program>, <from your JTPA adult program>, <from your JTPA worker program>, <from your JTPA youth program>, <from your high school vocational program>, or at the <name of college>) if you needed them in the future? Would you say . . .

1-Yes, definitely
2-Yes, probably
3-Hard to say
4-No, probably not
5-No, definitely not
6-Don't Know
7-Refused to Answer

Q-3. Overall, on a scale of 1 to 10 where "1" means "Very Dissatisfied" and "10" means "Very Satisfied" how satisfied are you with the services?

Very Dissatisfied									Very Satisfied	DK	REF
1	2	3	4	5	6	7	8	9	10	11	12

Q-4. Considering all of the expectations you may have had about the services, to what extent have the services met your expectations? "1" now means "Met None Of My Expectations" and "10" means "Met All Of My Expectations."

Met None									Met All	DK	REF
1	2	3	4	5	6	7	8	9	10	11	12

Q-5. Now I want you to think of the ideal program for people in your circumstances. How well do you think the services you received compare with the ideal set of services? "1" now means "Not Very Close To The Ideal."

Not Very Close									Very Close	DK	REF
1	2	3	4	5	6	7	8	9	10	11	12

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Reasons for Enrolling

Q-6. Next I'd like you to think back to the time when you decided to enroll in this training program at/through (NAME OF INSTITUTION) / in the <name of program> training program. Did you decide to enroll . . .

	READ. ROTATE.	Yes	No	DK/Ref.
a.	To improve your skills for a job you already had?	1	2	3
b.	To learn skills for a new job?	1	2	3
c.	To either get or finish a degree or certificate?	1	2	3
d.	For your own personal enjoyment or improvement?	1	2	3
e.	To get job search assistance	1	2	3
f.	To get on-the-job training	1	2	3
g.	To get a GED	1	2	3
h.	To improve your reading skills	1	2	3
i.	To improve your math skills	1	2	3
j.	To improve your ability in English	1	2	3
k.	To give you more self-confidence in basic skills	1	2	3
l.	To make school more interesting	1	2	3
m.	To get work-place or on-the-job experience	1	2	3
n.	To prepare for postsecondary education or training	1	2	3
For some other reasons (specify)		1	2	3

Q-7. Did you consider enrolling at any other schools colleges, or training programs to get this kind of training?

1.	Yes	CONTINUE
2.	No	SKIP TO Q-7b.
3.	Don't Know/Refused	SKIP TO Q-7b.

Q-7a. What other schools, colleges, training programs did you consider? (RECORD NAME AND LOCATION OF SCHOOL.

Q-7b. Did you choose (the <NAME OF INSTITUTION> / the school you attended) because . . .

	READ. ROTATE.	Yes	No	DK/Ref.
a.	You could get trained in a short period of time?	1	2	3
b.	Classes were held at convenient times?	1	2	3
c.	You believed it offered a high quality program?	1	2	3
d.	It was the only school that offered what you wanted to study?	1	2	3
e.	It had small class sizes?	1	2	3
f.	The program started on a convenient date?	1	2	3
g.	Your employer recommended it?	1	2	3
h.	It was conveniently located?	1	2	3
i.	It was affordable?	1	2	3

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Program Completion

Q-8. Did you complete your course of study/apprenticeship/training program before leaving the college/school/program last year?

1. Yes
2. No
3. Don't Know/Refused

Experience with the Program

Q-9. <Name of program> programs (The) <name of institution> offer(s) many different types of services to help people find jobs. As I read the following list, please tell me if you needed that service while you were enrolled. Did you need?

Q-9a. (IMMEDIATELY AFTER EACH 'YES' in Q9) Did you receive it?

Q-9b. (IMMEDIATELY AFTER EACH 'YES' IN Q9a) Did it meet your needs?

	READ. ROTATE.	9. Did you need?			9a. Did you receive?			9b. Meet needs?		
		Yes	No	DK	Yes	No	DK	Yes	No	DK
a.	Career or job counseling?	1	2	3	1	2	3	1	2	3
b.	Assistance with resume writing?	1	2	3	1	2	3	1	2	3
c.	Assistance with learning how to search for a job?	1	2	3	1	2	3	1	2	3
d.	Assistance with job interviewing techniques?	1	2	3	1	2	3	1	2	3
e.	Information on job openings?	1	2	3	1	2	3	1	2	3
f.	Information on the labor market?	1	2	3	1	2	3	1	2	3
g.	Child care assistance?	1	2	3	1	2	3	1	2	3
h.	Transportation assistance?	1	2	3	1	2	3	1	2	3
i.	Financial assistance?	1	2	3	1	2	3	1	2	3
j.	Information about government services?	1	2	3	1	2	3	1	2	3
k.	Access to services for the disabled?	1	2	3	1	2	3	1	2	3
l.	Did you need any other types of assistance or information when you enrolled in the training program? If yes, "What other types of assistance or information did you get?	1	2	3	1	2	3	1	2	3

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Q-10. (Ask of JTPA clients only) Did you receive any training through the program?

1. Yes CONTINUE
2. No SKIP TO Q12

Next, I'm going to read a list of different types of training. As I read each one, please tell me if you received that type of training (a the <name of institution> / through the classroom portion of your apprenticeship). Section repeats for (through the on-the-job portion of your apprenticeship program).

Q-10a. Did you receive training in . . . (READ. ROTATE.)

Q-10b. (FOR EACH 'YES') Did the training improve your skill a lot, a little, or not at all?

	READ. ROTATE.	Q10a.			Q10b.			
		Yes	No	DK/ Ref.	A Lot	A Little	Not At All	DK/ Ref
a.	The operation of machinery or equipment, other than computers	1	2	3	1	2	3	4
b.	Specific job skills	1	2	3	1	2	3	4
c.	Writing skills	1	2	3	1	2	3	4
d.	English speaking skills							
e.	Reading skills							
f.	Math skills	1	2	3	1	2	3	4
g.	Critical thinking or problem solving	1	2	3	1	2	3	4
h.	Work habits	1	2	3	1	2	3	4
i.	How to work with people who are different from you	1	2	3	1	2	3	4
j.	Team work skills	1	2	3	1	2	3	4

Q-10.k. Did the <name of program> program / your classes at the <name of institution> include any training in the use of computers or the use of the internet? If no, skip Q-10.l through Q-10.q. Did you receive . . .

		Q-10a.			Q-10b.			
		Yes	No	DK/ Ref.	A Lot	A Little	Not At All	DK/ Ref
l.	A general introduction to computer basics							
m.	A general understanding of how computer hardware works							
n.	How to use computer software for specific tasks such as spreadsheets, word processing, or email							

o.	How to use the Internet							
p.	General understanding of how computer networks function							
q.	How to install and troubleshoot software							

Q-11. (Asked of all samples except Adult Basic Education and Apprentice) Did your program include training on the job, such as internship, work-based learning, clinical experience, or cooperative education?

1. Yes
2. No SKIP TO Q12
3. Don't Know SKIP TO Q12
4. Refused SKIP TO Q12

Q-11a. Did the work-related training improve your skill:

1. A Lot
2. A Little
3. Not at All
4. Don't Know
5. Refused

Q-12. Next, I'm going to read a list of statements about the (training program /classroom instruction of the apprenticeship program) you participated in. As I read each one, please tell me how much you agree or disagree with the statement.

The first/next one is . . . Would you say you STRONGLY AGREE, SOMEWHAT AGREE, SOMEWHAT DISAGREE, or STRONGLY DISAGREE with that statement?

	READ. ROTATE.	Agree		Disagree		DK/ Ref.
		Strng	Swht	Swht	Strng	
a.	The program was relevant to what employers want	1	2	3	4	5
b.	The program was well organized	1	2	3	4	5
c.	The cost was affordable	1	2	3	4	5
d.	The program was up-to-date	1	2	3	4	5
e.	The program was interesting	1	2	3	4	5
f.	The class/program times were convenient	1	2	3	4	5
g.	The location was convenient	1	2	3	4	5

(For apprenticeship sample only) Next I'm going to read a similar list of statements, but these will deal with your on-the-job training portion of your apprenticeship. Again, as I read each, please tell me how much you agree or disagree with that statement. The first/next one is . . . Would you say you STRONGLY AGREE, SOMEWHAT AGREE, SOMEWHAT DISAGREE, or STRONGLY DISAGREE with that statement?

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	READ. ROTATE.	Agree		Disagree		DK/
		Strng	Swht	Swht	Strng	Ref.
h.	The training was well organized	1	2	3	4	5
i.	The training used up-to-date equipment	1	2	3	4	5
j.	You learned skills that you could use in other employment	1	2	3	4	5
k.	You learned from co-workers who were good teachers	1	2	3	4	5

Q-12b. To what extent did you meet your (educational) objective as a result of your enrollment? Would you say that you . . .. READ

1.	Definitely met your objectives in this training program	1	SKIP TO Q13
2.	Partially met your objectives	2	CONTINUE
3.	Did not meet your objectives at all	3	CONTINUE
4.	Don't Know	4	SKIP TO Q13
5.	Refused		

Q-12c. Why didn't you completely meet your (educational) objective? (PROBE and CLARIFY)

Satisfaction with the Program

Q-13. Next is a list of program features. As I read each, please tell me how satisfied or dissatisfied you were with this feature. (Please answer each as it applied to the classroom portion of your apprenticeship.) The first/next feature is . . . would you say you were VERY SATISFIED, SOMEWHAT SATISFIED, SOMEWHAT DISSATISFIED, OR VERY DISSATISFIED?

	READ. ROTATE.	Satisfied		Dissatisfied		DK/	Didn't
		V	S	S	V	Ref	Use/ NA
a.	Advice on selecting a training program, if you received any						
b.	The equipment you used						
c.	The facilities and the buildings where the training was held						
*d.	The length of the training program. If dissatisfied, ask Q13.d.i.						
e.	The quality of the teaching						
f.	The opportunity to interact with instructors outside of class						
g.	The usefulness of the training to your career						

Q-13.d.i. Was the program too long or too short?

Q-13h. "Would you say that the program covered too much material, not enough material, or was it about right?"

1. Too Much
2. Not Enough
3. About Right
4. Don't Know
5. Refused

Q-13.i. "Would you say that the program took too long to cover the material, covered it too quickly, or paced it about right?

1. Too Long
2. Too Quickly
3. About Right
4. Don't Know
5. Refused

Q-14. Overall, would you say that you were very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied with the training program/classroom training portion of your apprenticeship?

1. Very Satisfied
2. Somewhat Satisfied
3. Somewhat Dissatisfied
4. Very Dissatisfied
5. Vol. Neutral
6. Don't Know
7. Refused

Ask Q14 again of apprenticeship sample of "on-the-job training portion of your apprenticeship."

Employment 6 Months Pre Training

First, we would like to ask you about any jobs you held about 4 to 6 months before you started your training program. That is, between (DATE1) and (DATE2)

FOR YOUTH PROGRAMS
Q-15pre Between (DATE1) and (DATE2) were you going to school?
If yes, were you working on a HSD, GED, a college degree, or none of these?
What type of school were you attending? Was it a . . .

1. High School
2. A two-year college
3. A four-year college
4. Some other type of school
5. Don't Know
6. Refused

Q-15. Did you do any work for pay **during those three months**?

1. Yes
2. No (SKIP TO Q-17)
3. Don't Know (SKIP TO Q-17)
4. Refused (SKIP TO Q-17)

Q-16. Did you work at more than one job at that time?

1. Yes
2. No
3. Don't Know
4. Refused

Q-16a. How many hours did you *typically* work each week? (If respondent asks which job, interviewer say, "This question is referring to ALL jobs you may have had during that time period.")

Q-17. Were you self-employed at that time?

1. No
2. Yes, self-employment was my primary source of income
3. Yes, however self-employment was not my primary source of income

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Q-18. In what state did you work? [If respondent is "on the move" (like a trucker), and answers with several states, ask "In which of these states is your employer located?] (NOTE: This question looks for out-of-state UI coverage.)

1. Washington only
2. Washington and Other: Specify
3. Other: Specify
4. Don't Know
5. Refused

Q-19. Were you a union member during that time?

1. Yes
2. No
3. Uncertain

Q-20. If Q-17 = 2 (Self-employed is primary job), then skip to Q-22.

Q-20a. If Q-16 = 2 (Only one employer) then: Did your employer provide a health care plan?

If Q-16 = 1 (More than one employer) then: Did any of your employers provide a health care plan?

1. Yes
2. No
3. Uncertain
4. Refused

Q-21. If Q-16 = 2 (Only one employer) then: Did your employer pay into a retirement program for you, other than social security?
If Q-16 = 1 (More than one employer) then: Did any of your employers pay into a retirement program for you, other than social security?

1. Yes
2. No
3. Uncertain
4. Refused

Q-22. To what extent was your training related the job you held prior to training? Was the training . . .

1. Very related to that job
2. Somewhat related to that job
3. Not related to that job
4. Refused

SKIP TO Q-24

Q-23. *If you were not employed,* were you looking for work?

1. Yes
2. No
3. Don't Know
4. Refused

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Employment 9 Months Post

Next, we would like to ask you about any jobs you held about 7 to 9 months after leaving (PROGRAM). That is, between (DATE3) and (DATE4)

Q-24. Did you do any work for pay **during those three months?**

1. Yes
2. No (Skip to Q26)
3. Don't Know (Skip to Q26)
4. Refused (Skip to Q26)

Q-25. Did you work for more than one employer at that time?

1. Yes
2. No
3. Don't Know
4. Refused

Q-25a. How many hours did you *typically* work in one week for all jobs? _____

Q-26. Were you self-employed at that time?

1. No
2. Yes, self-employment was my primary source of income
3. Yes, however self-employment was not my primary source of income
4. Skip: If Q24 = No and Q26 = No, go to Q38

Q-27. Were you still working at the same firm between (Date 3) and (Date 4) as you did between (Date 1) and (Date 2)?

1. Yes
2. No
3. Don't Know
4. Refused

Q-28. Did the type of job you were doing between (Date 3) and (Date 4) change from the type of job you were doing between (Date 1) and (Date 2)?

1. Yes
2. No
3. Don't Know
4. Refused

Q-29. In what state did you work? (NOTE: This question looks for out-of-state UI coverage.)

1. Washington only
2. Washington and Other: specify (record other state(s))
3. Other: specify
4. Don't Know
5. Refused

Q-29a. (Read only for those who answered 1 on Q-25.) For the remainder of this section, we would like you to answer the questions thinking about the job in which you earned the most money during this period.

Q-29b. What was your title at that job? (Not for analysis. Result used to phrase Q-35 and Q-36.)

Q-30. How many total hours did you usually work each week? _____

Q-31. Was that job with a temporary employment agency?

1. Yes
2. No
3. Don't Know
4. Refused

Q-32. Were you a union member at that job?

1. Yes
2. No
3. Uncertain

Q-33. If Q-26 = 2 (Self-employed is primary job), then skip to Q-35.

Q-33a. Did your employer provide a health care plan with that job?

1. Yes
2. No
3. Uncertain

Q-34. Did your employer pay into a retirement program for you, other than social security?

1. Yes
2. No
3. Uncertain

Q-35. Next is a list of job characteristics. For each one I read, please tell me if you were satisfied or dissatisfied with that characteristic as a ((Q-29c)). The first/next one is . . . Would you say that you were VERY SATISFIED, SOMEWHAT SATISFIED, SOMEWHAT DISSATISFIED, or VERY DISSATISFIED?

		Very Satisfied	Somewhat Satisfied	Somewhat Satisfied	Very Satisfied
a.	Job responsibilities	1	2	3	4
b.	Salary	1	2	3	4
c.	Advancement opportunities	1	2	3	4
d.	Job in general	1	2	3	4

Q-36. To what extent was your training related to the job you had as a(n) <Q29c>? Was the training . . .

1. Very related to that job
2. Somewhat related to that job
3. Not related to that job
4. Don't Know
5. Refused

Q-37. Did you move your residence to take this job?

1. Yes
2. No
3. Don't Know
4. Refused

SKIP TO Q-41

Q-38. (Ask of those who answer No to Q-24 and Q-26) Were you looking for work?

1. Yes — Go to Q-39
2. No — Go to Q-40
3. Don't Know — Go to Q-41

Q-39. People give many different reasons why they are looking for work but unable to find a job. For each of the following, please indicate whether or not it is a reason you were unable to find a job you wanted. Were you unable to find a job because . . .

		Yes	No	DK	Refused
a.	The jobs you could get did not pay enough				
b.	There were few jobs available in your line of work				
c.	There were few jobs available in your geographic area				
d.	You could not work the hours of the jobs that were available				

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e.	You did not have the necessary skills for the jobs that were available				
f.	Health problems made it difficult for you to work				
g.	You did not have the necessary skills for the jobs that were available				
h.	Transportation problems made it difficult for you to work				
i.	You did not like the jobs that were available				
j.	Some other reason. Specify				

SKIP TO Q-41

Q-40. What is the main reason you were not looking for work between <DATE3> and <DATE4>? Leave as open-ended, code based on following categories.

(a) I was in school/training program
(b) I was retired or doing volunteer work
(c) I was waiting for a recall from the previous job
(d) I was waiting for assignment from a temporary agency
(e) I was caring for children
(f) The jobs I could get did not pay enough
(g) There were few jobs available in my line of work
(h) There were few jobs available in my geographic area
(i) I could not work the hours of the jobs that were available
(j) I did not have the necessary skills for the jobs that were available
(k) Health problems made it difficult for me to work
(l) Transportation problems made it difficult for me to work
(m) Employers discriminated against me
(n) I was doing something else
(o) I didn't want to work

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Current Employment

Q-41. Next, we would like to ask you about any jobs you currently have.

Did you do any work for pay **last week**?

1. Yes (If Q-24 = 2 "didn't work 9 months post, then skip to Q-44, if Q-24 = 1, then continue)
2. No — Go to Q45
3. Don't Know — Go to Q45
4. Refused — Go to Q45

Q-42. Are you still working at the same employer that we just talked about?

1. Yes — Continue
2. No — Go to Q-44
3. Don't Know — Go to Q-44
4. Refused — Go to Q44

Q-42b. Are you doing the same job or type of work as we just talked about?

1. Yes — Go to Q-48
2. No — Go to Q-47
3. Don't Know — Go to Q-47
4. Refused — Go to Q-47

Q-43. Did you work at more than one job last week?

1. Yes
2. No
3. Don't Know
4. Refused

Q-44. Are you currently self-employed?

1. No
2. Yes, self-employment is my primary source of income
3. Yes, however self-employment is not my primary source of income

Q-45. In what state did you work? (NOTE: This question looks for out-of-state UI coverage.)

1. Washington only
2. Washington and Other: specify _____ (record other states)
3. Other: specify
4. Don't Know
5. Refused

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Q-46. To what extent was your training related to your current job? Was the training . . .

1. Very related to that job
2. Somewhat related to that job
3. Not related to that job
4. Don't Know
5. Refused

Other Training Received

Q-47. Now I want to ask you about any training you may have received from your current employer. First, have you taken any classes or workshops at your place of work that lasted four (4) or more hours?

1. Yes
2. No
3. Don't Know
4. Refused

Q-48. Have you received any on-the-job training from your employer that lasted more than four (4) or more hours?

1. Yes
2. No
3. Don't Know
4. Refused

Q-49. Have you taken any classes or workshops at a school or college that your employer paid for that lasted four (4) or more hours?

1. Yes
2. No
3. Don't Know
4. Refused

Q-50. Thinking of all the types of training you received from your employer, how worthwhile was this training in its effect on your ability to do your job? Was this training very worthwhile, somewhat worthwhile, or not at all worthwhile?

1. Very worthwhile
2. Somewhat worthwhile
3. Not at all worthwhile

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Other Training Needed

Q-51. Are there any skills you would like to further improve either through your employer or through an educational institution or training program?

1. Yes
2. No — Go to Q-54
3. Don't know — Go to Q-55
4. Refused — Go to Q-55

Q-52. Which job skills would you most like to improve? Leave as an open ended question and code responses in the following categories:

		Y	N
a.	Computer skills	1	2
b.	Skills to operate a particular kind of machinery or equipment	1	2
c.	Specific job skills	1	2
d.	Writing skills	1	2
e.	Math skills	1	2
f.	Critical thinking or problem solving	1	2
g.	Team work	1	2
h.	Work habits	1	2
i.	How to work with people who are different from you	1	2
j.	Decision making	1	2
k.	English speaking skills	1	2
l.	Reading skills	1	2
m.	Communication skills	1	2
n.	Leadership or management skills	1	2
o.	Other	1	2
p.	Don't Know	1	2
q.	Refused	1	2

Q-53. If Q-41 = 1 (employed currently) Go to Q-56
If Q-41 = 2 (not currently employed), then continue
Are you looking for work?

1. Yes
2. No

Demographics

We are almost finished now. The next few questions are for classification purposes only. Your answers will help us understand the backgrounds of people are participating in the training programs. Again, I want to assure you that anything you tell me will be kept strictly confidential.

Q-54. To help us determine tabulate the ages of people participating in training programs, would you tell me in what year were you born?

Q-54a. (Ask if necessary) For survey purposes, I need to ask if you are Male or Female.

Q-55. At the time that you enrolled in training, what was the highest level of education that you had completed? (PROBE AND CLARIFY)

1. No high school diploma
2. High school diploma
3. GED
4. Some schooling after high school but no degree or certificate
5. Vocational certificate/diploma
6. Two year associates degrees **Ask Q-55a**
7. Bachelors degree
8. Post-graduate degree
9. Other: specify
10. Don't Know
11. Refused

Q-55a. (ASK ONLY IF TWO YEARS ASSOCIATES DEGREE) Was the purpose of your Associates Degree . . . .READ

1. To prepare you for a specific job
2. For a general arts education
3. Don't Know
4. Refused

Q-56. Are you of either Spanish or Hispanic origin?

1. Yes
2. No
3. Don't Know
4. Refused

Q-57. What race do you consider yourself to be? Are you . . . .(READ) (IF NECESSARY: What is your family origin or descent?) (IF MIXED: With which racial group do you identify most closely?)

1. White or Caucasian
2. African American or Black
3. American Indian/Alaska Native
4. Asian or Pacific Islander
5. Vol. Other: specify
6. Don't Know
7. Refused

Q-58. Was the last high school that you attended in Washington State?

1. Yes
2. No
3. Don't Know
4. Refused

Q-59. Are you currently living in Washington?

Q-60. In what year did you (most recently) move to Washington State?

1. Lived here all my life 1
2. Year moved 19__ __

Q-61. During 1998 did anyone in your household receive income or support from . . . READ. ROTATE.

READ. ROTATE.		Yes	No	D/K	Ref.
a.	Supplemental Security Income (SSI)	1	2		
b.	Aid to Families with Dependent Children (AFDC)	1	2		
c.	Food Stamps	1	2		

Q-62. (SKIP IF CURRENTLY EMPLOYED IN Q-41) Do you have a physical, mental or other health condition that has lasted for 6 months or more and which prevents you from working at a job (not including pregnancy)?

1. Yes Go to Q-64
2. No
3. Don't Know
4. Refused

Q-63. Do you have a physical, mental or other health condition that has lasted for 6 months or more and which limits the kind or amount of work you can do at a job (not including pregnancy)?

1. Yes
2. No
3. Don't Know
4. Refused

Q-64. What is the highest level of education that YOUR MOTHER completed? PROBE AND CLARIFY.

1. No high school diploma
2. High school diploma
3. GED
4. Some schooling after high school but no degree or certificate
5. Vocational certificate/diploma
6. Two year associates degrees
7. Bachelors degree
8. Post-graduate degree
9. Other: specify
10. Don't Know
11. Refused

Q-65. What is the highest level of education that YOUR FATHER completed? PROBE AND CLARIFY.

1. No high school diploma
2. High school diploma
3. GED
4. Some schooling after high school but no degree or certificate
5. Vocational certificate/diploma
6. Two year associates degrees
7. Bachelors degree
8. Post-graduate degree
9. Other: specify
10. Don't Know
11. Refused

Q-66. Finally, which of the following categories best describes your total household income from all sources during 1998 before taxes were taken out? Please stop me when I reach the correct income range. Was it . . . .READ. STOP WHEN RESPONDENT SAYS YES.

1. Less than $6,000
2. $6,000 to just under $12,000
3. $12,000 to just under $18,000
4. $18,000 to just under $24,000
5. $24,000 to just under $40,000
6. $40,000 or more
7. Don't Know
8. Refused

Thank and Close

That completes our survey. We appreciate your time and cooperation. Thank you so much for helping us out. Do you have any additional comments or questions about the training program you participated in or about this survey?

Q-67. Record gender by observation

1. Male
2. Female

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